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ABSTRACT

This chartbook presents, in graphic and textual form, data on employment and disability in the United States. Each page contains a topic question, a brief explanatory text (using data from the original source), an explanatory graphic, identification of the source of the information, and identification of the survey used to collect the data. The 38 topic questions are grouped into six sections which provide information on: (1) the extent of work disability; (2) characteristics of persons with a work disability; (3) causes of work disability; (4) work disability and the labor force; (5) work disability, income, and earnings; and (6) support for people with a work disability. A glossary provides definitions of 19 work-related terms. A bibliography of 30 items and an appendix providing summaries of the surveys providing the data are included. (DB)

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CHARTBOOK ON WORK DISABILITY IN THE UNITED STATES

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Finally we would like to thank Sean Sweeney, Project Officer for his effort on this project. This project is another in the continuing effort of the National Institute on Disability and Rehabilitation Research to make information on disability statistics available to wider audiences.

Foreword

In our effort to provide vital descriptive information on the status of persons with disabilities in the United States, we at the National Institute on Disability and Rehabilitation Research are pleased to publish this chartbook on work disability. This publication should be a significant resource for policymakers, advocates, vocational and rehabilitation personnel, media representatives, and the public in general.

The topic of this chartbook, work and disability, is especially important at this time because of the recent passage of the Americans with Disabilities Act of 1990. Ten percent of the U.S. working age population have a work disability. With unemployment among people with disabilities running at 14.2%, over two and one half times the rate of individuals with no disabilities, the need for action is quite evident. Information on many aspects of work and disability available within this book should provide basic data for those seeking to improve the lives of individuals with disabilities.

We are pleased to have InfoUse, the creator of our popular Chartbook on Disability in the United States, produce this publication. We have noted a overwhelmingly positive reaction to the clear, non-technical presentation style of that chartbook. Data summarized within this chartbook is presented in a similar manner and uses the most current information collected nationally.

We believe this chartbook will be a useful resource for anyone needing information about work and people with disabilities.

William H. Graves

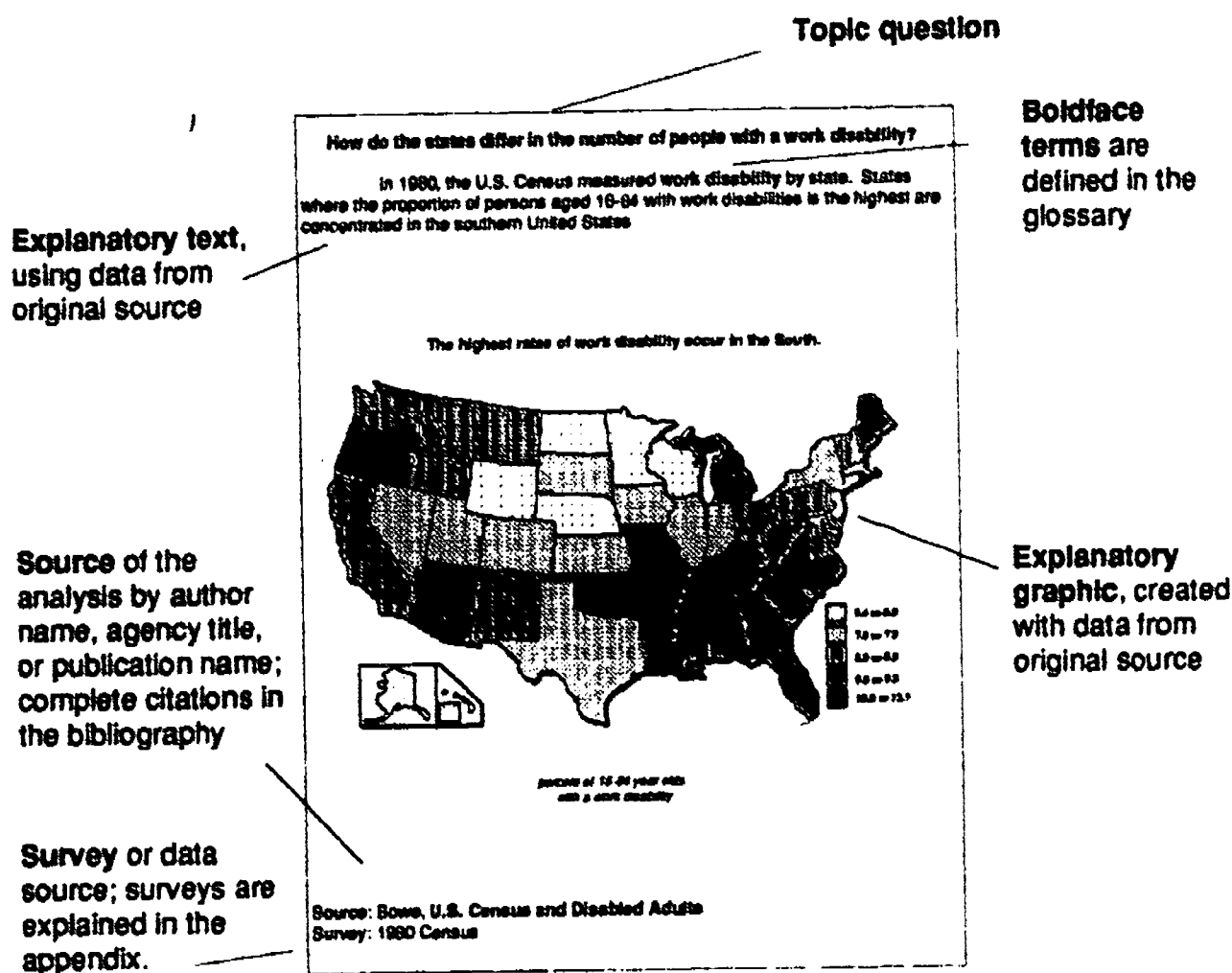
Director

National Institute on Disability and Rehabilitation Research

Preface

The **Chartbook on Work Disability in the United States** is a reference on work disability in the U.S. population. We have created it for use by nontechnical and technical audiences alike. The book is a resource for agencies, organizations, employers, researchers, and others needing to know about those people in the population who have a work disability.

Each page contains a **topic question**, **explanatory text** on the topic, and an **explanatory graphic (or table)** that provides data in an easy-to-read form. The **source** of the information and the **survey** used to collect the data appear at the bottom of the page. The surveys have a technical summary located in the appendix. In the text, key terms are shown in boldface and are defined in the glossary at the end of the book.



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Introduction

A person has a **work disability** if they are of working age and are limited in ability to work. As will be seen in the following pages, many sources have collected data on people with a work disability. Data coverage in the **Chartbook on Work Disability in the United States** includes national surveys such as the Current Population Survey, the Survey of Income and Program Participation, the decennial Census, the National Health Interview Survey, and the Annual Survey of Occupational Illnesses and Injuries. In addition, other analyses by federal statistical agencies such as the Bureau of the Census, the National Center for Health Statistics, and the Bureau of Labor Statistics and selected programmatic information from the Social Security Administration, the Department of Labor, Rehabilitation Services Administration, and other federal programs concerned with work disability will be summarized.

For those interested in the "basics" of work disability (i.e., how many people have a work disability, severity, and institutionalization), **section 1** provides that information. **Section 2** describes the population by characteristics like gender, age, race, and ethnicity as collected by the various surveys. What causes a work disability is the focus of **section 3**. **Section 4** provides information on people in the labor force both with and without a disability. Specific information about the working situation of people with a work disability is covered in **section 5**, including issues such as occupations held and industries worked in. Finally, **section 6** shows program data from governmental agencies involved in providing support to this population.

SECTION 1

EXTENT OF WORK DISABILITY

This section covers the extent of work disability in our society. Using data from national surveys, we answer the questions of *How many people have a work disability?* and *How many people have a severe work disability?* These surveys cover the civilian, noninstitutionalized population in the United States. Therefore, we also present a page on *How many people in institutions have a work disability* using data from the 1980 Census.

Data collected over the past decade answer the questions of *Has the number of people with a work disability changed over time?* and *Has the number of people with a severe work disability changed over time?*

Finally, a statewide comparison of work disability is given to answer *Do the states in the U.S. differ in the number of people with a work disability?*

How many people have a work disability?

Recent surveys covering work disability include the annual March Income Supplement to the Current Population Survey (CPS), the Survey of Income and Program Participation (SIPP), and the decennial Census from the Bureau of the Census, as well as the National Center for Health Statistics' annual National Health Interview Survey (NHIS). These surveys estimate work disability levels in the U.S., but use slightly different measures.

Current Population Survey (1988)

Total population with a work disability: 13.4 million people
Percentage of working age population: 8.6%
Working ages: 16-64 years

Definition of work disability:

A person age 16 to 64 who ...

- has a health problem or disability which prevents him or her from working or which limits the kind or amount of work he or she can do; 11.1 million people
- or ever retired or left a job for health reasons; 4.5 million people
- or did not work in the survey week because of an illness or disability lasting 6 months or more, which is physical or mental in nature, and which prevents the performance of any kind of work; 2.1 million people
- or did not work at all in the previous year because of being ill or disabled; 5.2 million people
- or is covered by Medicare; 2.9 million people
- or is a recipient of SSI - Supplemental Security Income; 2.1 million people

National Health Interview Survey (1983-1985, averaged)

Total population with a work disability: 17.4 million people
Percentage of working age population: 11.5%
Working ages: 18-69 years

Definition of work disability:

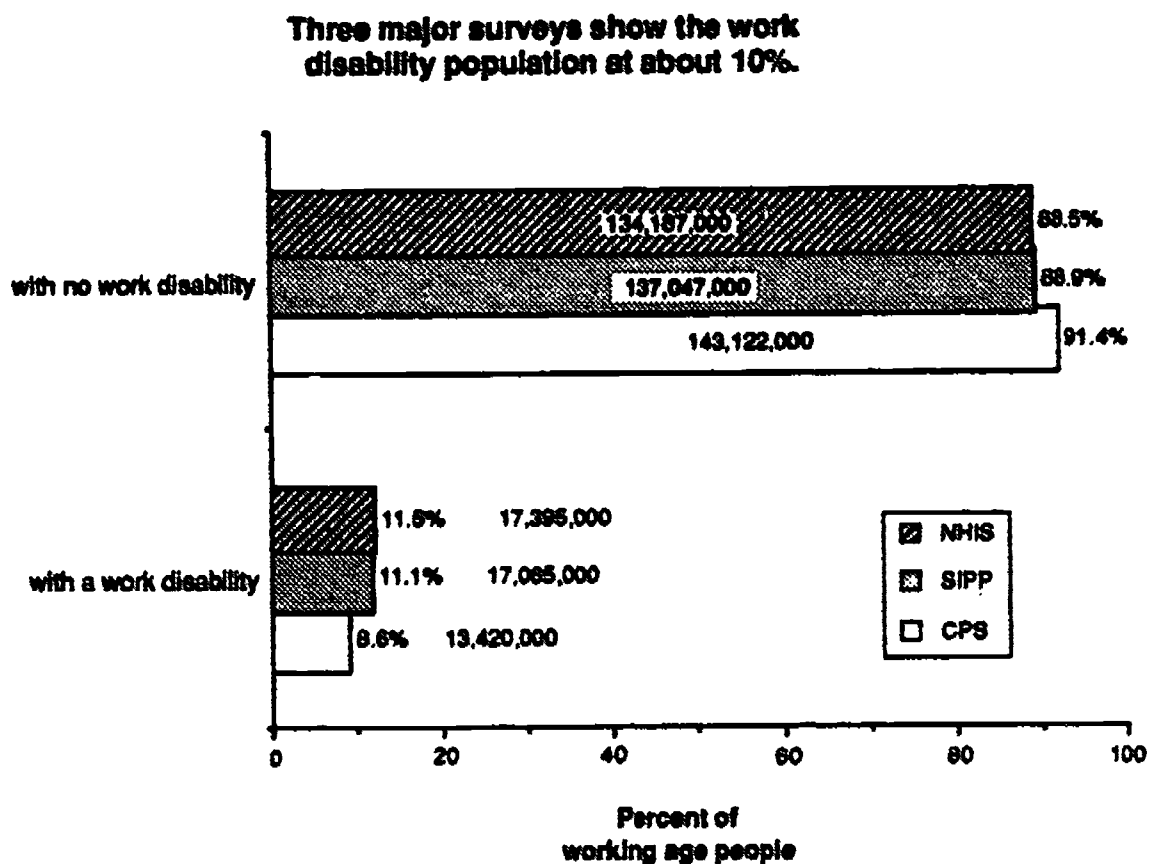
A person age 18 to 69 who ...

- is limited in the amount or kind of work one can do 7.5 million people
- or is unable to do work due to a chronic condition or impairment 9.9 million people

Survey of Income and Program Participation (1986)

Total population with a work disability: 17.1 million people
 Percentage of working age population: 11.1%
 Working ages: 16-64 years
 Definition of work disability:
 A person age 16 to 64 who ...
 • has a health condition which limits the kind or amount of work he or she can do 7.9 million people
 • or has a health condition which prevents the person from working 8.2 million people

Details about each survey and all other data sources are listed in the Appendix.



Source: Bureau of the Census, Special Studies, Series P-23, # 160
 Survey: CPS, 1988

Source: LaPlante, 1988
 Survey: NHIS, 1983-1985

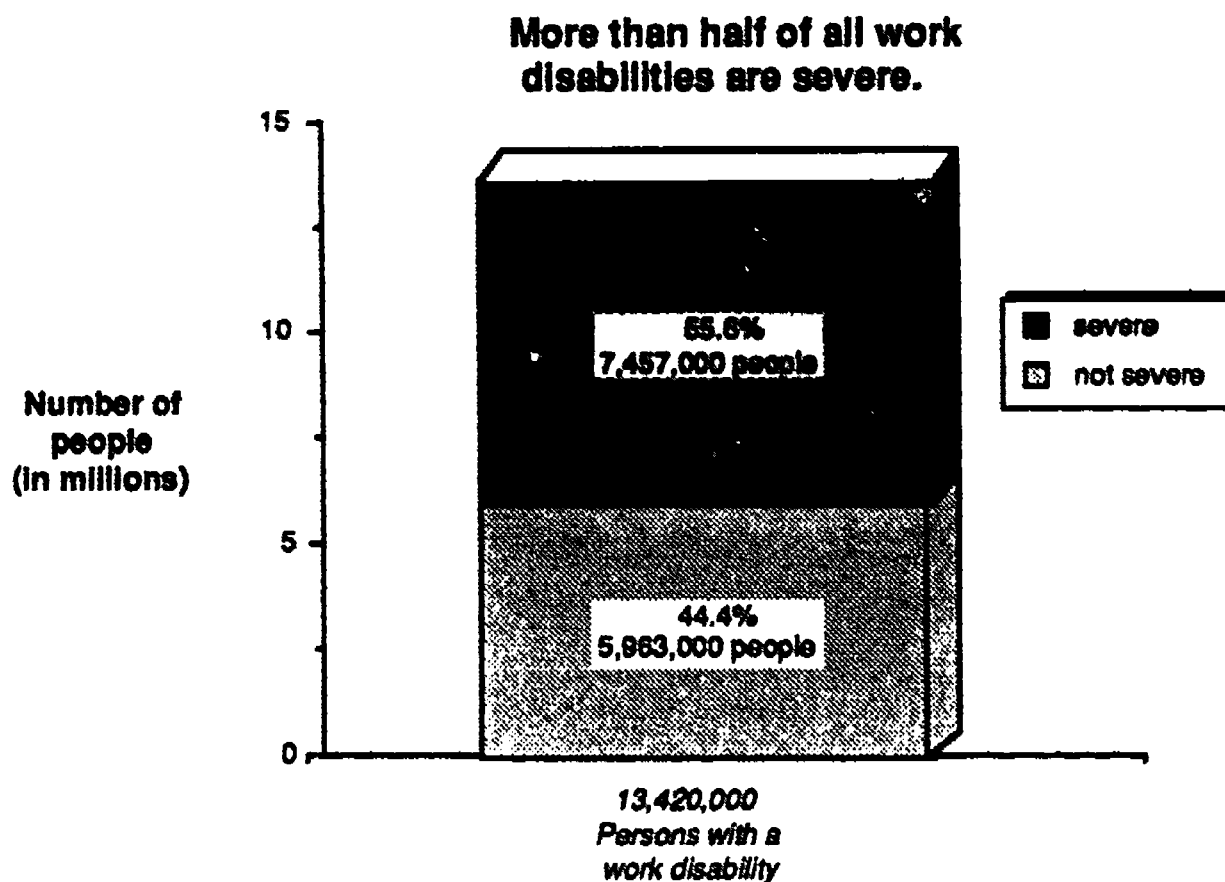
Source: Bureau of the Census, unpublished estimates
 Survey: SIPP, 1986

How many people have a severe work disability?

There are an estimated 7.5 million people of working age (16-64) who have a **severe work disability**. The Bureau of the Census' CPS defines severe work disability as someone who is age 16 to 64 and:

- did not work in the survey week because of an illness or disability lasting 3 months or more, which is physical or mental in nature, and which prevents the performance of any kind of work;
- did not work at all in the previous year because of illness or disability;
- is covered by Medicare; or
- is a recipient of SSI (Supplemental Security Income).

Those with a severe work disability constitute more than 55% of the 13.4 million people with a work disability as measured by the CPS.

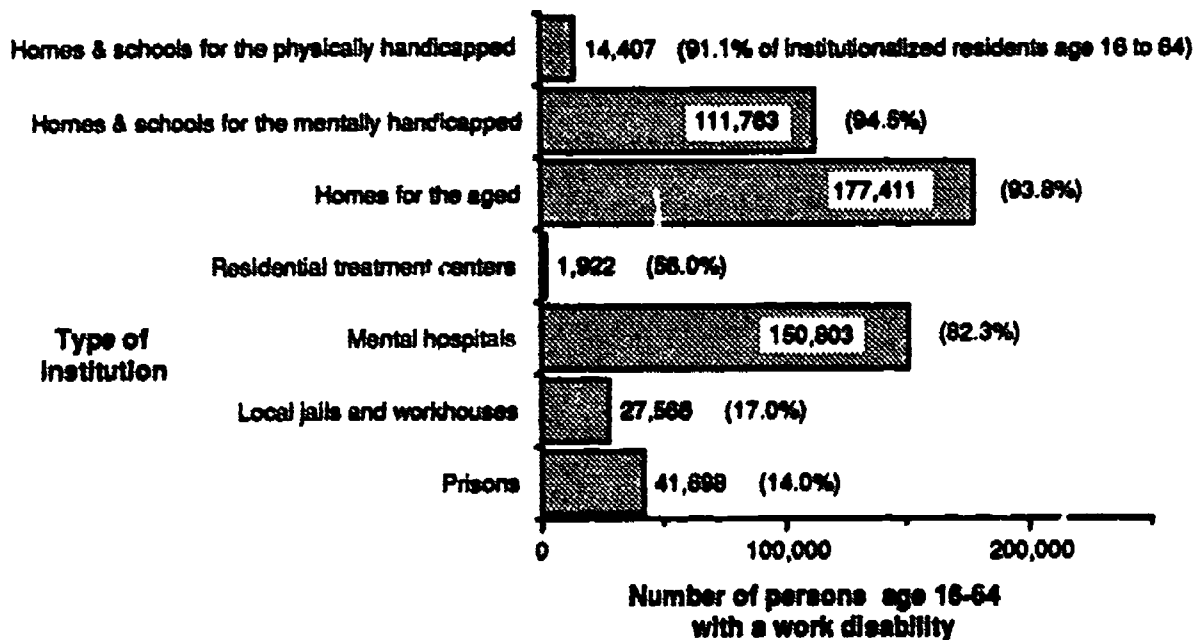


Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

How many people in institutions have a work disability?

Two and one-half million people are residents of institutions in the United States. Many residents aged 16 to 64 have a work disability. Of the 187,000 working age people in mental hospitals and residential treatment centers, 82.3% of those in mental hospitals and 56.0% of those in residential treatment centers have a work disability. Of the 189,000 persons aged 16 to 64 receiving care in homes for the aged, almost half of whom are under age 55, an estimated 93.8% have a work disability. Likewise, high levels of work disability are evident for working age populations receiving care in homes and schools for the mentally handicapped (94.5% of the 118,000 persons), and homes and schools for the physically handicapped (91.1% of the 15,000 persons). On the other hand, of the estimated 460,000 persons aged 16 to 64 in prisons, local jails, and workhouses, only an estimated 15.1% (69,000) have a work disability.

Over 525,000 people in institutions have a work disability.



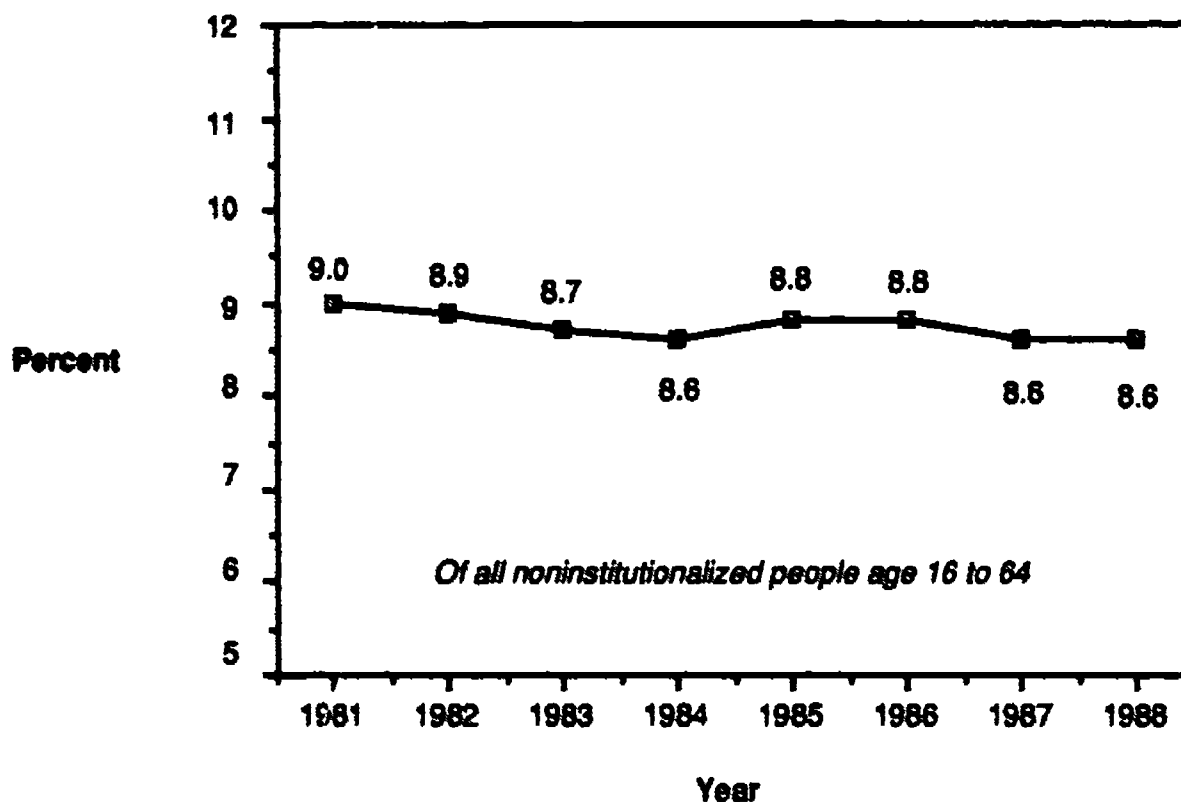
Source: Bureau of the Census, Census of Persons in Institutions and Other Group Quarters, PC80-2-4D
Survey: U.S. Census, 1980

**Has the number of people with a work disability
changed over time?**

Between 1981 and 1988, the total number of people with a work disability increased from 13,088,000 to 13,420,000. Males with a work disability decreased from 6,768,000 to 6,706,000 during the time period, while females with a work disability increased from 6,319,000 in 1981 to 6,714,000 in 1988. The 1988 numbers mark the first time that the number of work disabled women has surpassed that for men.

The percentage of persons with a work disability in the general population varied over the period from 9.0 to 8.6%. For men the percentages dropped from 9.5% to 8.7%, while for women, the rates were fairly constant (8.5%-8.4%).

**Little change has occurred in the
work disability prevalence rate since 1981.**



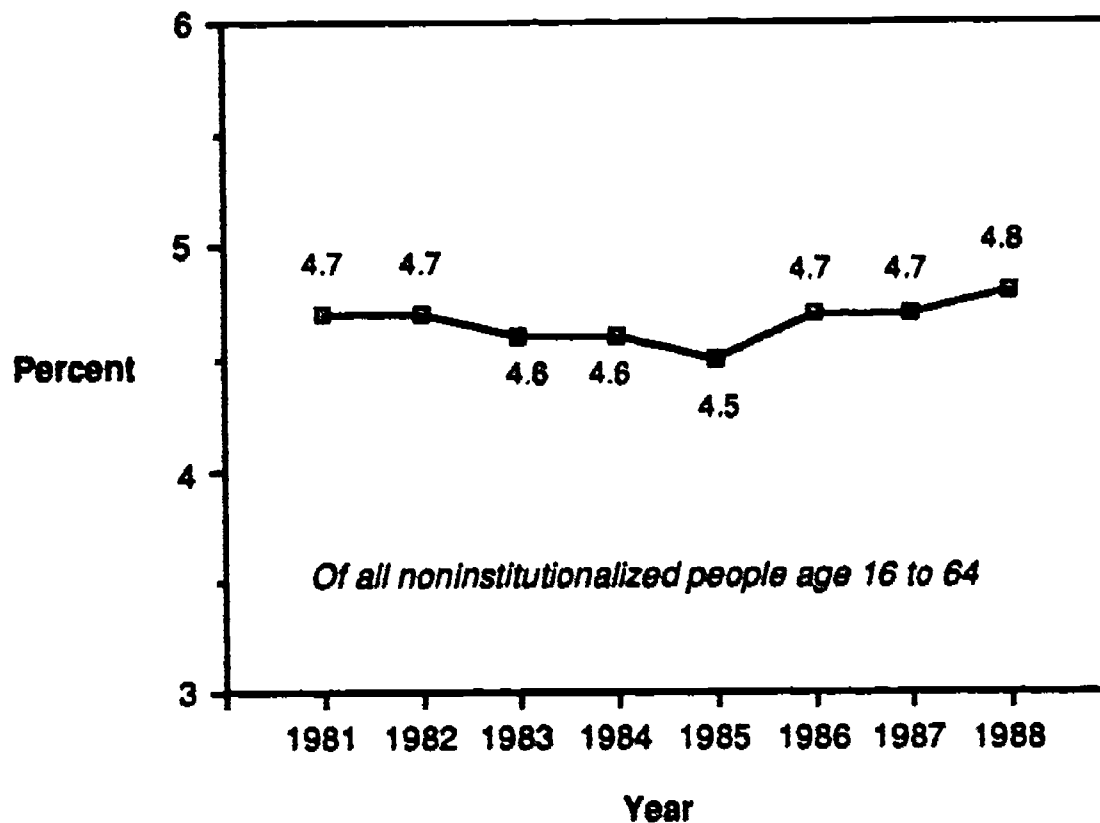
Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

Has the number of people with a severe work disability changed over time?

The number of persons with a severe work disability increased during the 1981 to 1988 period. Males with a severe work disability increased from 3,386,000 in 1981 to 3,791,000 in 1988, while females increased from 3,493,000 to 3,666,000 during that period.

The increase is due mainly to an increase in population, however, because there has been virtually no change in the percentage of people with a severe work disability: 4.7% of the population had a severe work disability in 1981 and 4.8% were in that situation in 1988. No change is observed for either men or women (4.8% to 4.9% from 1981 to 1988 for men and 4.7% to 4.6% for women).

The prevalence rate of severe work disability has remained virtually constant since 1981.

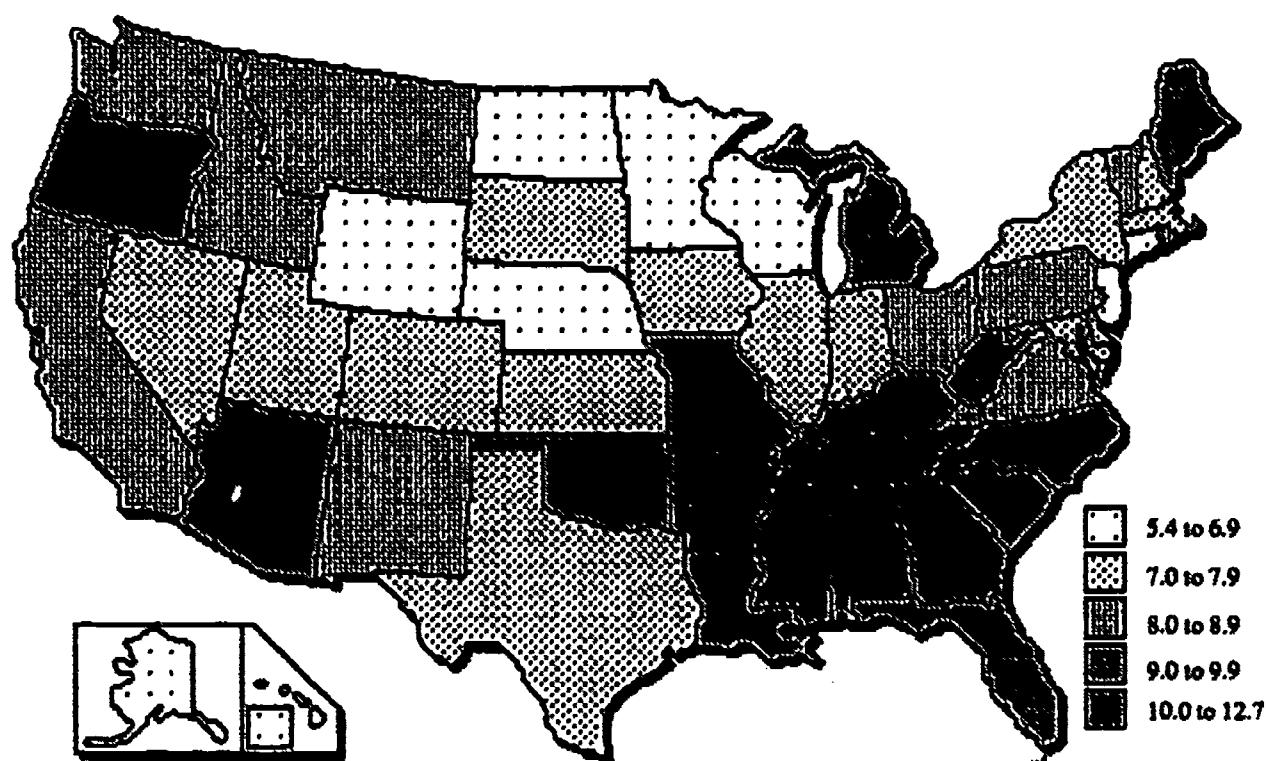


Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

Do states differ in the percent of the population with a work disability?

In 1980, the U.S. Census measured work disability by state. States where the percent of the population aged 16-64 with work disabilities is the highest are concentrated in the southern United States. Eight states registered rates over 10%: Arkansas (12.7%); West Virginia (12.3%); Mississippi (11.8%); Kentucky (11.4%); Oklahoma (10.8%); Alabama (10.6%); Georgia (10.4%); and Tennessee (10.4%).

The highest rates of work disability occur in the South.



*percent of 16-64 year olds
with a work disability*

Source: Bowe, U.S. Census and Disabled Adults
Survey: 1980 Census

People with a work disability by state

	Number	Percent		Number	Percent
Alabama	256,907	10.6	Montana	40,515	8.1
Alaska	14,798	5.4	Nebraska	67,958	7.0
Arizona	155,114	9.1	Nevada	42,509	7.8
Arkansas	175,668	12.7	New Hampshire	44,362	7.5
California	1,279,189	8.2	New Jersey	327,094	6.9
Colorado	139,413	7.2	New Mexico	67,013	8.2
Connecticut	131,583	6.5	New York	865,589	7.7
Delaware	30,785	7.9	North Carolina	371,231	9.7
District of Columbia	43,259	9.9	North Dakota	26,955	6.7
Florida	594,133	9.9	Ohio	608,718	8.8
Georgia	360,534	10.4	Oklahoma	203,213	10.8
Hawaii	38,181	5.9	Oregon	166,103	9.9
Idaho	50,303	8.7	Pennsylvania	642,761	8.5
Illinois	529,724	7.3	Rhode Island	52,445	8.6
Indiana	277,282	8.0	South Carolina	196,202	9.8
Iowa	130,044	7.2	South Dakota	31,585	7.6
Kansas	112,640	7.6	Tennessee	303,421	10.4
Kentucky	260,983	11.4	Texas	688,618	7.6
Louisiana	250,218	9.6	Utah	64,862	7.5
Maine	68,258	9.7	Vermont	27,712	8.5
Maryland	223,903	8.0	Virginia	298,695	8.4
Massachusetts	270,537	7.3	Washington	235,684	8.8
Michigan	548,782	9.3	West Virginia	149,815	12.3
Minnesota	180,577	7.0	Wisconsin	199,407	6.8
Mississippi	177,434	11.8	Wyoming	18,522	6.1
Missouri	280,333	9.1			

Source: Bowe, U.S. Census and Disabled Adults
Survey: 1980 Census

SECTION 2

CHARACTERISTICS OF PERSONS WITH A WORK DISABILITY

This section reviews the demographic characteristics of people with a work disability. It describes how work disability varies according to age, sex, race and ethnicity, and education.

How does work disability differ by sex?

There is little difference in the percentage of working age males and females with a work disability. The 6.7 million males with a work disability make up 8.7% of the male population age 16-64. In comparison, the 6.7 million females with a work disability comprise 8.4% of the female population of the same age.

There are 4.9% of males with a severe work disability (3.8 million males) compared to 4.6% of females (3.7 million females).

Males have higher levels of work disability at all ages.

Age groups	Males		Females		Total
16-24	4.1%	(674,000)	3.6%	(610,000)	3.8% (1,285,000)
25-34	5.9%	(1,249,000)	5.4%	(1,165,000)	5.6% (2,414,000)
35-44	7.7%	(1,308,000)	6.5%	(1,147,000)	7.1% (2,455,000)
45-54	10.3%	(1,190,000)	10.2%	(1,252,000)	10.3% (2,443,000)
55-64	22.4%	(2,285,000)	22.2%	(2,540,000)	22.3% (4,825,000)
Total	8.7%	(6,706,000)	8.4%	(6,714,000)	8.6% (13,420,000)

Numbers may not total correctly due to rounding.

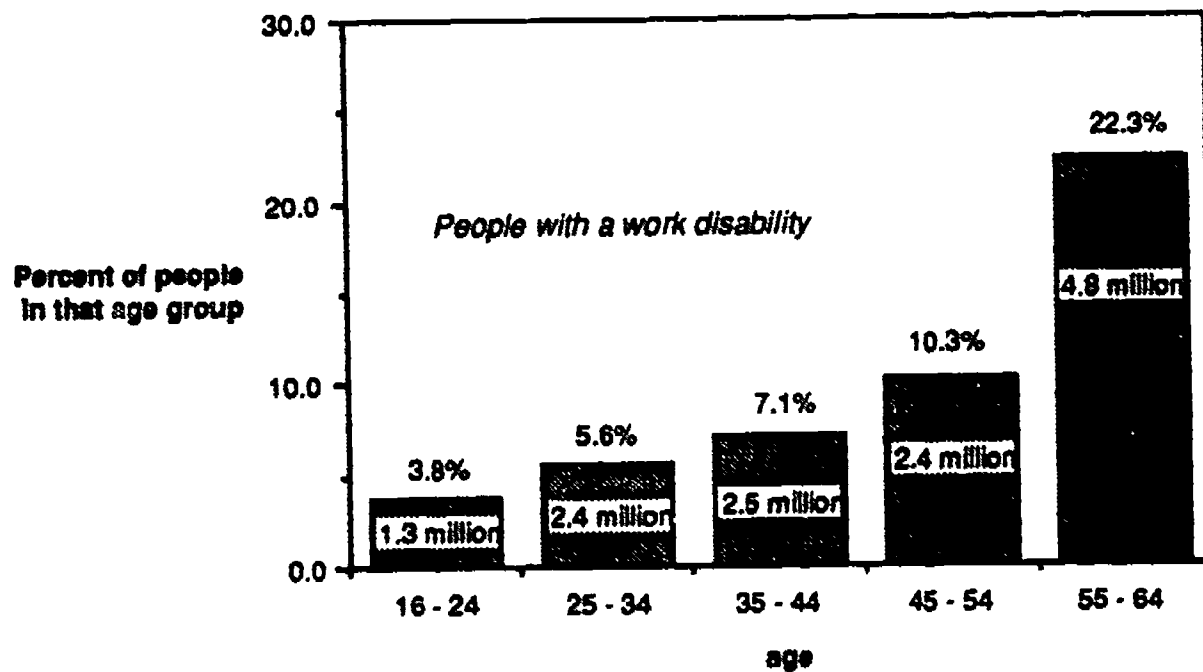
Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

How does work disability differ by age?

Work disability increases with age. Of those age 16-24 years, 3.8% are work disabled, but of those age 25-34 years, the proportion rises to 5.6%. It continues to rise to 7.1% for those age 35-44 years, to 10.3% for those between 45 and 54 years of age, and finally reaches 22.3% for the 55-64 year old age group.

This relationship of age and work disability is even more pronounced for severe work disability. Only 1.7% have a severe work disability at ages 16-24, compared with 2.7% for those people ages 25-34 years and 3.6% for those in the 35-44 year range. In older age groups, however, the rise is more steep: 45-54 years - 6.0%; and 55-64 years - 14.0%.

Work disability increases with age.



Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

How is work disability associated with race and ethnicity?

From the CPS, among persons 16 to 64 years of age, higher percentages of blacks have a work disability than whites or Hispanics (who can be of any race). An estimated 13.7% of blacks reported having a work disability compared with 7.9% of whites and 8.2% of Hispanics (see chart below).

A more detailed breakdown of races and ethnicities is reported from the NHIS for the population age 18 to 69. Native Americans report the highest levels of limitation in work due to a chronic condition (17.4% or 153,000 persons). Black non-Hispanics also have high levels (14.7%, 2.4 million). Lowest reported levels occur in Asian Americans (5.6%, 162,000 persons). White non-Hispanics (9.3%, 13.6 million people), white Hispanics (9.3%, 750,000 people) and black Hispanics (11.2%, 45,000) fall somewhere in the middle. It should be noted that differences between these populations may depend on cultural as well as demographic distinctions.

Blacks report higher levels of work disability than whites.

Race and Ethnicity	Males		Females		Total
Black	13.7%	(1,144,000)	13.8%	(1,387,000)	13.7% (2,512,000)
White	8.2%	(5,390,000)	7.7%	(5,154,000)	7.9% (10,544,000)
Other	6.7%	(172,000)	7.2%	(193,000)	6.9% (364,000)
Total	8.7%	(6,706,000)	8.4%	(6,714,000)	8.6% (13,420,000)

*Hispanic origin** 8.4% (524,000) 7.9% (488,000) 8.2% (1,011,000)

* Hispanic Origin can be of any race.

Source: Bureau of the Census, Special Studies, Series P-23, # 160

Source: LaPlante, 1988
Survey: NHIS, 1983-1985

Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

How does education relate to work disability?

As the level of educational attainment rises, the level of work disability goes down. Of those people who had less than eight years of elementary school, 29.7% have a work disability. A reported 24.6% of those who completed only 8 years of school (elementary school level) have a work disability. The proportion decreases consistently with education level: 17.7% of those not finishing high school; 8.8% of those completing high school only; 7.5% of those with 1-3 years of college; and 3.8% of those with 4 or more years of college.

While work disability drops with rising education level, **severe work disability** falls even more quickly. Of those with 8 or less years of education, 23.4% are unable to work, compared with 16.8% of those with 9-11 years of education, 11.6% of people with 12 years of education, 4.5% of those with 13-15 years of school, and only 1.3% of people with 16 or more years of education.

As educational attainment goes up, work disability goes down.

Education	Males		Females		Total	
Elementary (< 8 years)	29.1%	(970,000)	30.2%	(871,000)	29.7%	(1,841,000)
Elementary (8 years)	23.9%	(500,000)	25.2%	(528,000)	24.6%	(1,028,000)
High school (1-3 years)	17.5%	(1,365,000)	17.9%	(1,447,000)	17.7%	(2,811,000)
High school (4 years)	9.3%	(2,278,000)	8.4%	(2,505,000)	8.8%	(4,782,000)
College (1-3 years)	8.4%	(989,000)	6.7%	(897,000)	7.5%	(1,886,000)
College (4 or more years)	3.8%	(605,000)	3.8%	(466,000)	3.8%	(1,072,000)
Total	8.7%	(6,706,000)	8.4%	(6,714,000)	8.6%	(13,420,000)

Numbers may not total correctly due to rounding.

SECTION 3

CAUSES OF WORK DISABILITY

Work disabilities can be caused by a variety of circumstances both on and off the job. This section is devoted to answering the questions *What chronic health conditions are the most frequent causes of work disability? What chronic health condition have the highest risk of work disability?, Is there a relationship between prevalence of chronic conditions and work disability?, and How do occupational injuries and illnesses affect work disability?* This section provides the answer to *How many people with a functional limitation have a work disability?*

**What chronic health conditions are
the most frequent causes of work disability?**

**The five chronic health conditions most frequently reported as the
main cause of work limitation in persons aged 18-69 are:**

<u>Condition</u>	<u>Number of conditions that are main cause of work disability</u>	<u>Percent of all main causes of work disability</u>
Heart disease	2,133,000	12.2
Rheumatic fever (4.5%)		
Ischemic heart disease (52.0%)		
Heart rhythm disorders (6.9%)		
Other heart disease (36.6%)		
Arthritis	2,016,000	11.6
Rheumatoid arthritis (16.1%)		
Osteoarthritis/other arthropathies (83.9%)		
Spinal curvature and other back impairments	1,695,000	9.8
Curvature of back or spine (16.0%)		
Other impairment of back (84.0%)		
Intervertebral disk disorders	1,068,000	6.1
Impairment of lower extremities	883,000	5.1

Technical Note: NHIS chronic condition groups are based on the International Classification of Diseases (ICD-9) codes as adapted by the National Center for Health Statistics.

What chronic health conditions have the highest risk of work disability?

Some conditions have a high risk of work limitation. There are 24 conditions which cause a work limitation in a person age 18-69 at least one-fifth of the time. They are:

<u>Condition</u>	<u>Number of conditions causing a work disability</u>	<u>Percent of conditions causing a work disability</u>
Mental retardation	392,000	75.3
Absence of leg(s)	151,000	72.9
Lung or bronchial cancer	72,000	72.7
Blind in both eyes	129,000	71.9
Multiple sclerosis	91,000	58.9
Cerebral palsy	91,000	58.2
Partial paralysis in extremity	185,000	55.0
Absence of arm(s)/hand(s)	33,000	51.6
Complete paralysis in extremity	214,000	50.8
Cancer of digestive sites	67,000	46.8
Paralysis in non-extremity sites (complete/partial)	82,000	42.0
Intervertebral disk disorders	1,472,000	40.7
Rheumatoid arthritis	389,000	40.1
Other heart disease/disorders	1,117,000	39.9
Heart failure (6.3%)		
Valve disorders (18.8%)		
Congenital disorders (15.8%)		
All other and ill-defined heart conditions (59.1%)		
Orthopedic impairments other than extremities and back	98,000	39.5
Emphysema	541,000	38.7
Epilepsy	282,000	37.0
Pneumoconiosis/asbestosis	90,000	35.9
Cerebrovascular disease	434,000	32.5
Ischemic heart disease	1,391,000	31.6
Cancer of genitourinary sites	69,000	29.3
Diabetes	1,213,000	29.0
Cancer of the female breast	68,000	22.1
Orthopedic impairment of the back other than curvature	1,854,000	21.3

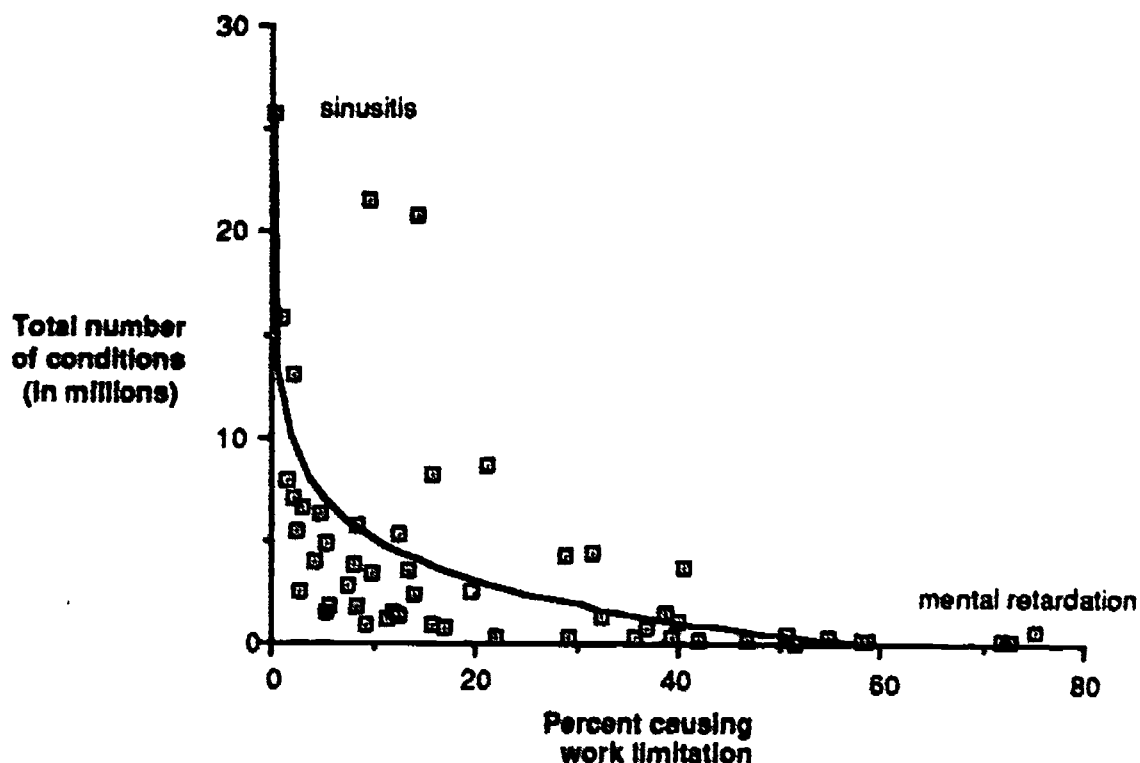
Technical Note: NHIS chronic condition groups are based on the International Classification of Diseases (ICD-9) codes as adapted by the National Center for Health Statistics.

Source: LaPlante 1989
Survey: NHIS, 1983-1986

Is there a relationship between prevalence of chronic conditions and work disability?

High prevalence conditions (totalling more than 10 million conditions nationwide) tend to cause work disability infrequently. An example is sinusitis, of which there are almost 26 million conditions nationally, but only 0.3% cause work limitation. Conversely, those conditions which cause the highest amounts of disability have low prevalence (totalling 500,000 conditions or less nationwide). Example conditions are mental retardation (75.3% of conditions cause work limitation) and lung cancer (72.7%).

High prevalence conditions rarely cause work disability, while low prevalence conditions frequently do.



Technical Note: NHIS chronic condition groups are based on the International Classification of Diseases (ICD-9) codes as adapted by the National Center for Health Statistics.

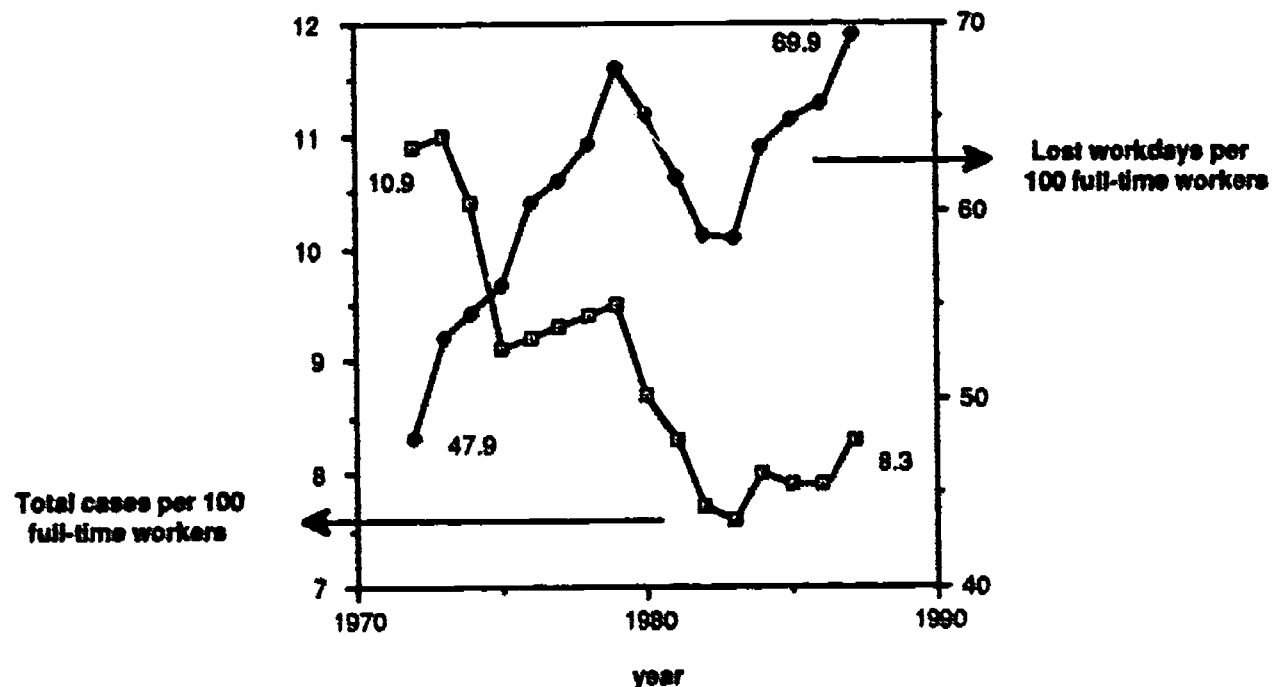
Source: LaPlante, 1988, 1989
Survey: NHIS 1983-1986

How do occupational injuries and illnesses affect work disability?

Occupational injuries and illnesses cause work disability. Over the past 16 years, the number of occupational injuries and illnesses has decreased, but the resulting number of workdays lost has increased. In 1972, 10.9 cases of occupational injury or illness were recorded for every 100 full-time workers. By 1987, that incidence rate had dropped to 8.3 cases per 100 workers. In 1972, occupational injuries and illnesses caused 47.9 lost workdays per 100 workers, whereas by 1987, the rate had increased to 69.9 lost workdays per 100 workers.

The most common occupational illnesses are disorders associated with repeated trauma (72,900 cases per year), skin diseases or disorders (54,200), respiratory conditions due to toxic agents (14,300), and disorders due to physical agents (13,800).

The effect of occupational illnesses and injuries has increased over the last 15 years.



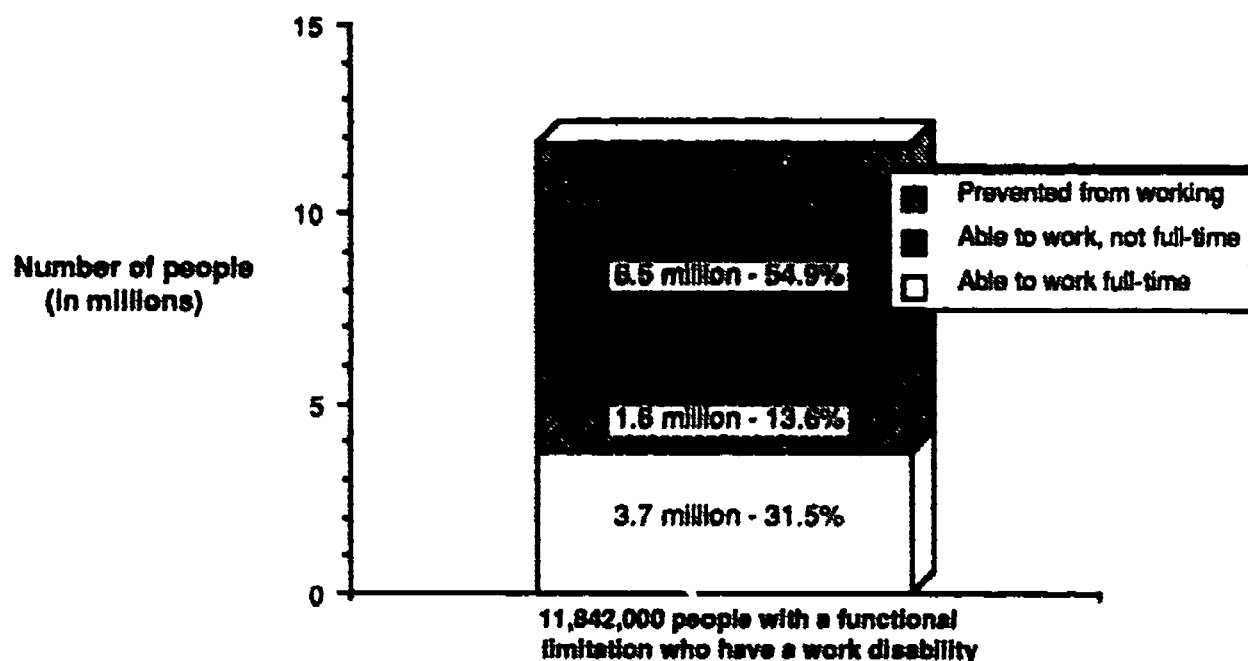
Source: Bureau of Labor Statistics, Bulletin 2328, 1989
Survey: ASOII, 1987

How many people with a functional limitation have a work disability?

Functional limitations, as measured in the SIPP, include having difficulty in hearing a normal conversation, walking a quarter of a mile, lifting or carrying something as heavy as a bag of groceries (10 lbs.), going up a flight of stairs without resting, seeing words and letters in ordinary newsprint, getting around outside the home, having one's own speech understood, getting around inside the home, and getting into and out of bed. Of the 21.7 million people age 16-64 with a functional limitation, 54.7% (11.8 million people) have a work disability.

For those people with a **severe functional limitation** (i.e., being unable to perform one of the above functions or needing the help of another person to perform the function), 83.9% (an estimated 5 million people) have a work disability. For people age 16-64 with no functional limitation, only 5% have a work disability. This difference holds true regardless of gender.

Of people who have a work disability due to a functional limitation, over half are prevented from working.



SECTION 4

WORK DISABILITY AND THE LABOR FORCE

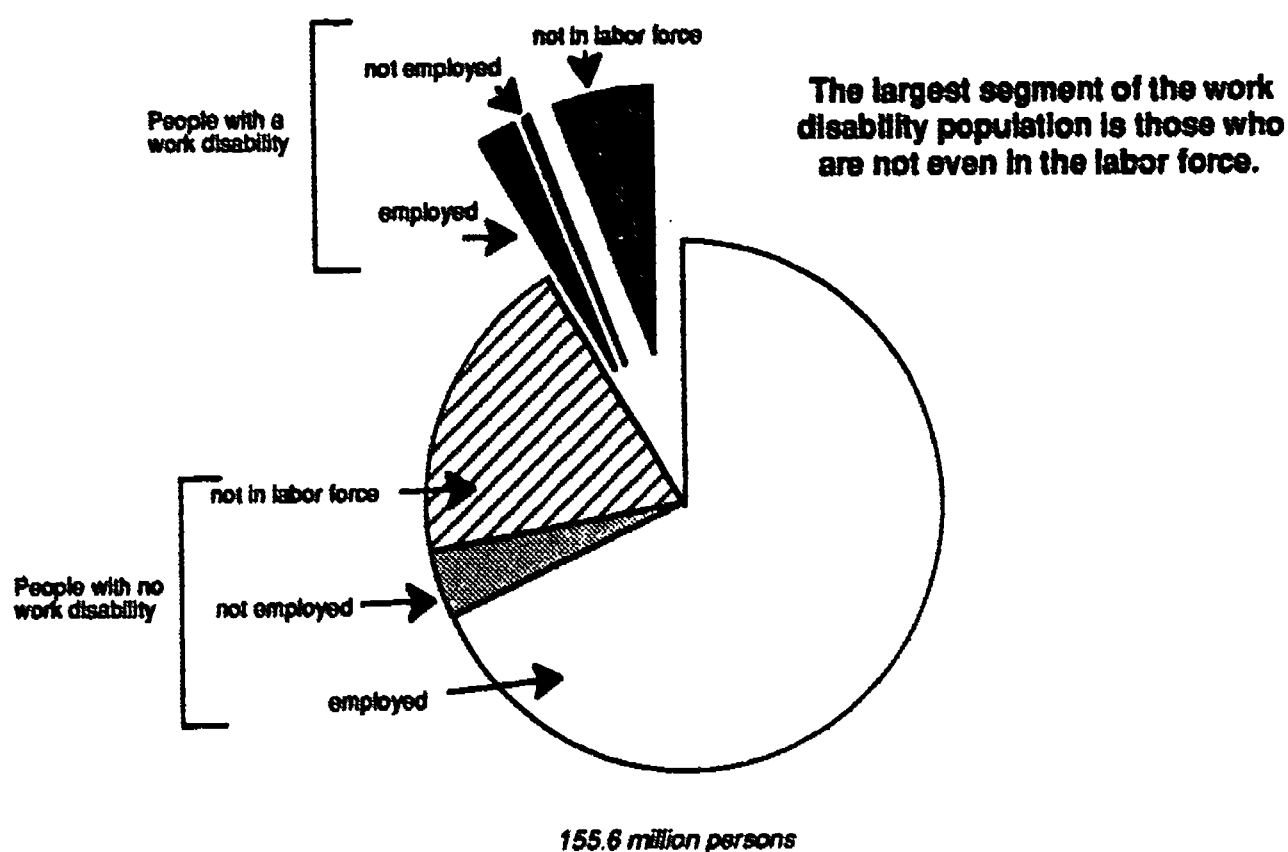
The previous sections dealt with the population of persons with a work disability. This section shows data related to people with a work disability and employment, namely *How many people with a work disability are in the labor force?* Data on labor force participation by state, age, sex, race and ethnicity, and education are also presented.

Measures of employment are reviewed such as *How many people with a work disability are unemployed?* and *How many people with a work disability are working full-time?*

Finally, data is shown on information on people with a work disability by occupation, industry, and employer.

How many people with a work disability are in the labor force?

As defined for the Current Population Survey, the labor force consists of people employed as civilians, people unemployed, and people in the Armed Forces during the survey week. Most of the population with a work disability is not in the labor force. Of the 13.4 million people with a work disability, only 31.6% are in the labor force while 14.2% are unemployed. In contrast, of the 142.2 million people with no work disability 78.9% are in the labor force, while the unemployment rate is only 5.8%.



	In the Labor Force		Not in the Labor Force		Total	
	With a work disability	With no work disability	With a work disability	With no work disability	With a work disability	With no work disability
Employed	3,635,000	105,778,000			3,635,000	105,778,000
Not employed	604,000	6,398,000	9,176,000	29,999,000	9,780,000	36,397,000
Total	4,239,000	112,176,000	9,176,000	29,999,000	13,415,000	142,175,000

Total number of people age 16-64 = 155,590,000

Source: Bureau of the Census, Special Studies, Series P-23, #160
Survey: CPS, 1988

Do work disability and labor force participation rates differ among the states?

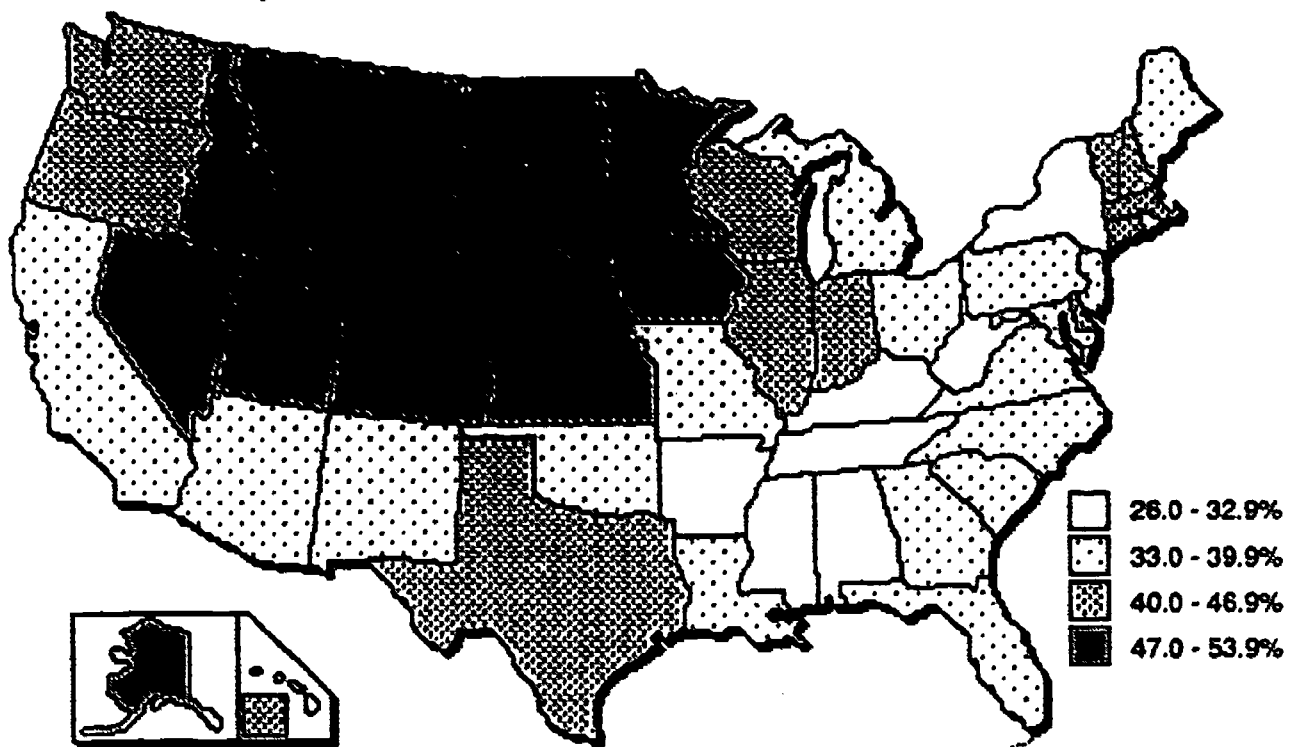
The percentage of people with a work disability in the labor force does vary across the states. Most of the states where the labor force participation for the work disability population is high are in the northwestern and north central U.S. The top ten states by rate are: 1) Wyoming (52.8%), 2) Alaska (52.7%), 3) Minnesota (50.8%), 4) South Dakota (50.5%), 5) Nebraska (49.9%), 6) Utah (49.6%), 7) North Dakota (49.5%), 8) Nevada (49.3%), 9) Colorado (48.0%), and 10) Idaho (47.6%).

People with a work disability who are in the labor force by state

	Number	Percent		Number	Percent
Alabama	80,907	31.5	Montana	19,022	47.0
Alaska	7,792	52.7	Nebraska	33,887	49.9
Arizona	59,412	38.3	Nevada	20,944	49.3
Arkansas	57,069	32.5	New Hampshire	20,173	45.5
California	494,461	38.7	New Jersey	122,209	37.4
Colorado	66,884	48.0	New Mexico	24,642	36.8
Connecticut	58,174	44.2	New York	284,539	32.9
Delaware	12,513	40.6	North Carolina	135,336	36.5
District of Columbia	14,753	34.1	North Dakota	17,335	49.5
Florida	204,735	34.5	Ohio	230,986	38.1
Georgia	125,246	34.7	Oklahoma	78,593	38.7
Hawaii	16,666	43.6	Oregon	77,032	46.4
Idaho	23,949	47.6	Pennsylvania	221,552	34.5
Illinois	214,168	40.4	Rhode Island	20,637	39.3
Indiana	116,668	42.1	South Carolina	67,226	34.3
Iowa	61,522	47.3	South Dakota	15,952	50.5
Kansas	53,199	47.2	Tennessee	97,846	32.2
Kentucky	80,282	30.8	Texas	287,420	41.7
Louisiana	83,806	33.5	Utah	32,189	49.6
Maine	26,218	38.4	Vermont	11,384	41.1
Maryland	89,280	39.9	Virginia	109,015	36.6
Massachusetts	108,910	40.3	Washington	108,570	45.2
Michigan	214,203	39.0	West Virginia	39,650	26.5
Minnesota	91,805	50.8	Wisconsin	90,422	45.3
Mississippi	54,642	30.8	Wyoming	9,772	52.8
Missouri	108,680	38.8			

Source: Bowe, U.S. Census and Disabled Adults Survey: 1980 Census

States with high percentages of people with a work disability in the labor force are mainly in the northern plains.



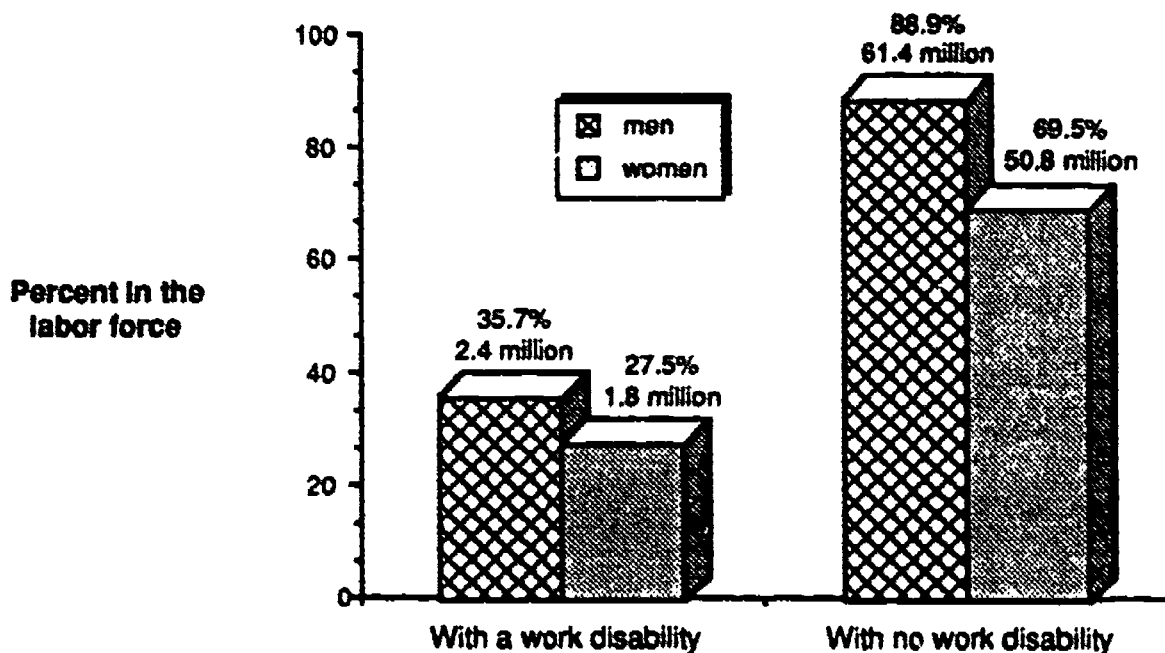
*percent of people age 16-64 with a
work disability who are in the labor force*

Source: Bowe, U.S. Census and Disabled Adults
Survey: 1980 Census

Does labor force participation of people with a work disability differ by sex?

More males age 16 to 64 with a work disability are in the labor force than females. This is also true for those without a work disability. There are 2.4 million men with a work disability (35.7%) compared with 1.8 million women with a work disability (27.5%). For the population with no work disability, 61.4 million men are in the labor force (88.9%) compared with 50.8 million women (69.5%). For both men and women, the labor force participation rate is approximately 60% less among people with a work disability than among people without.

Both men and women are less likely to be in the labor force if they have a work disability.



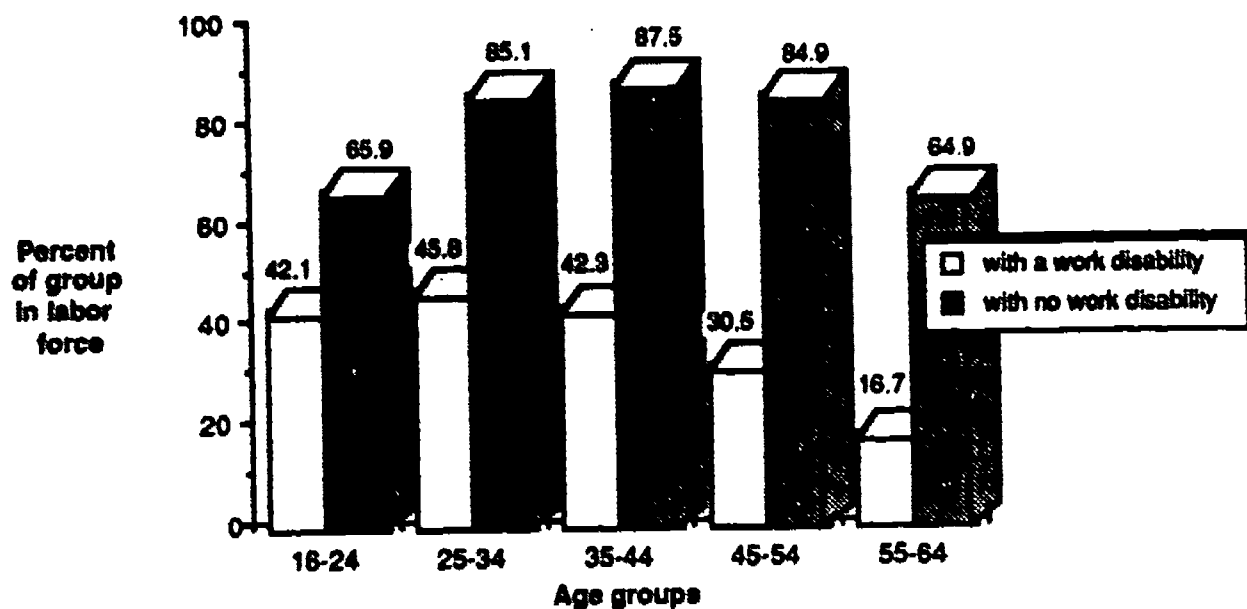
Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

Does labor force participation of people with a work disability differ by age?

Percentages of people with a work disability in the labor force generally decrease with age. For those age 16-24, 42.1% of those with a work disability are in the labor force (540,000). The rate increases for those age 25-34 years to 45.8% (1,105,000), then turns downward as people grow older: for those 35-44 years of age it is 42.3% (1,038,000); for those ages 45-54 years it is 30.5% (745,000); and for those ages 55-64 years it is 16.7% (806,000).

In comparison, people with no work disability have much higher labor force participation rates and much less decrease with age. At age 16-24, 65.9% are in the labor force (21 million people). The rate reaches 85.1% for people 25-34 years old (34.2 million), peaks at 87.5% for people 35-44 years old (28 million), decreases slightly to 84.9% for people 45-54 years old (18.1 million), and finally declines to 64.9% for those 55-64 years old (10.9 million).

As age increases, those with a work disability leave the labor force more than their nonwork-disabled counterparts.

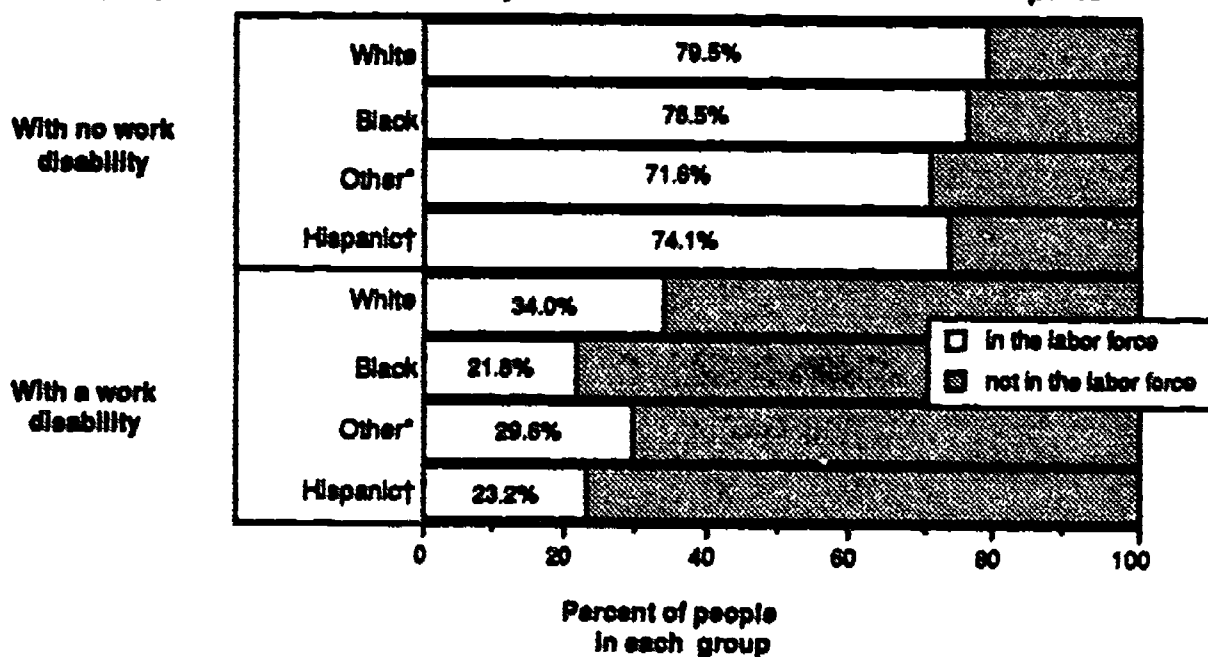


Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

Does labor force participation of people with a work disability differ by race and ethnicity?

Whites with a work disability had higher rates of labor force participation (34.0% - 3.6 million people) than blacks (21.8% - 547,000), persons of Hispanic origin (23.2% - 235,000) or persons of other races (29.6% - 108,000). In comparison, the labor force participation rates for persons without a work disability are more closely grouped: 79.5% of whites were in the labor force (96.7 million); 76.5% of blacks (12 million); 74.1% of persons of Hispanic origin (8.4 million) and 71.6% of people of other races (3.5 million).

Labor force participation differs more by race and ethnicity for people with a work disability than for their nondisabled counterparts.



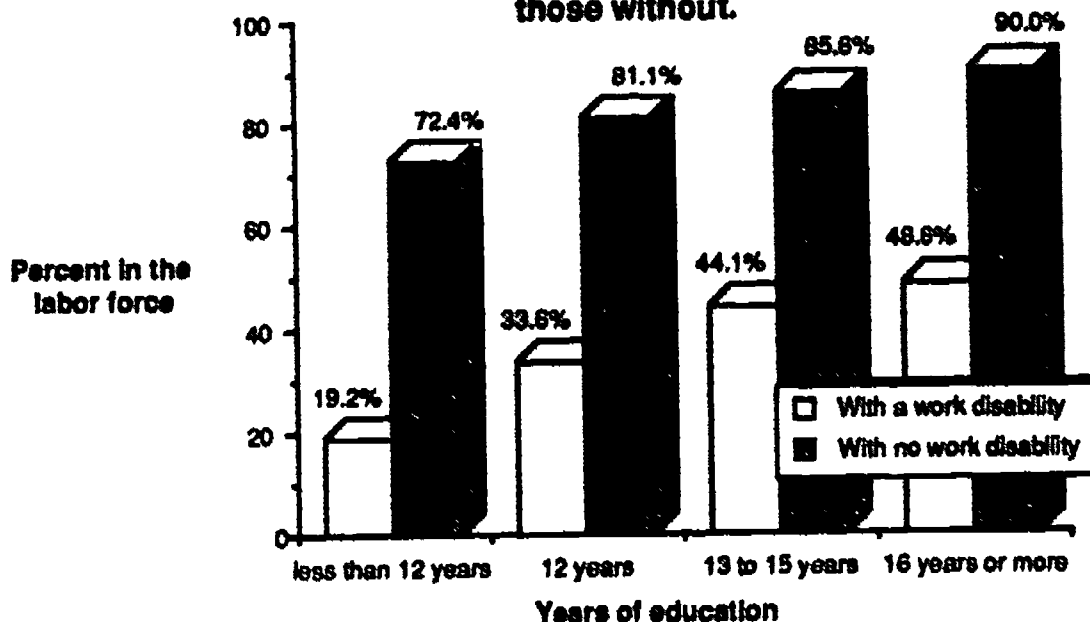
* "Other" includes all races other than White or Black
 † Hispanic can include people of any race

Source: Bureau of the Census, Special Studies, Series P-23, # 160
 Survey: CPS, 1988

Does labor force participation of people with a work disability differ by education?

As education rises, so does labor force participation for persons with a work disability. Of people with a work disability who are 25-64 years of age with less than 12 years of school completed, 19.2% were in the labor force (963,000 people). Of those completing 12 years of school, 33.6% were in the labor force (1.5 million); 13-15 years of school, 44.1% (760,000); and 16 years or more of school, 48.6% (511,000). In comparison, of the same 25-64 age group but with no work disability, those completing less than 12 years of school, 72.4% were in the labor force (13 million people). For those with 12 years of school, the rate was 81.1% (36.4 million); 13-15 years, 85.6% (17.9 million); and 16 years or more, 90.0% (23.9 million).

Labor force participation increases with education level more profoundly for those with a work disability than for those without.

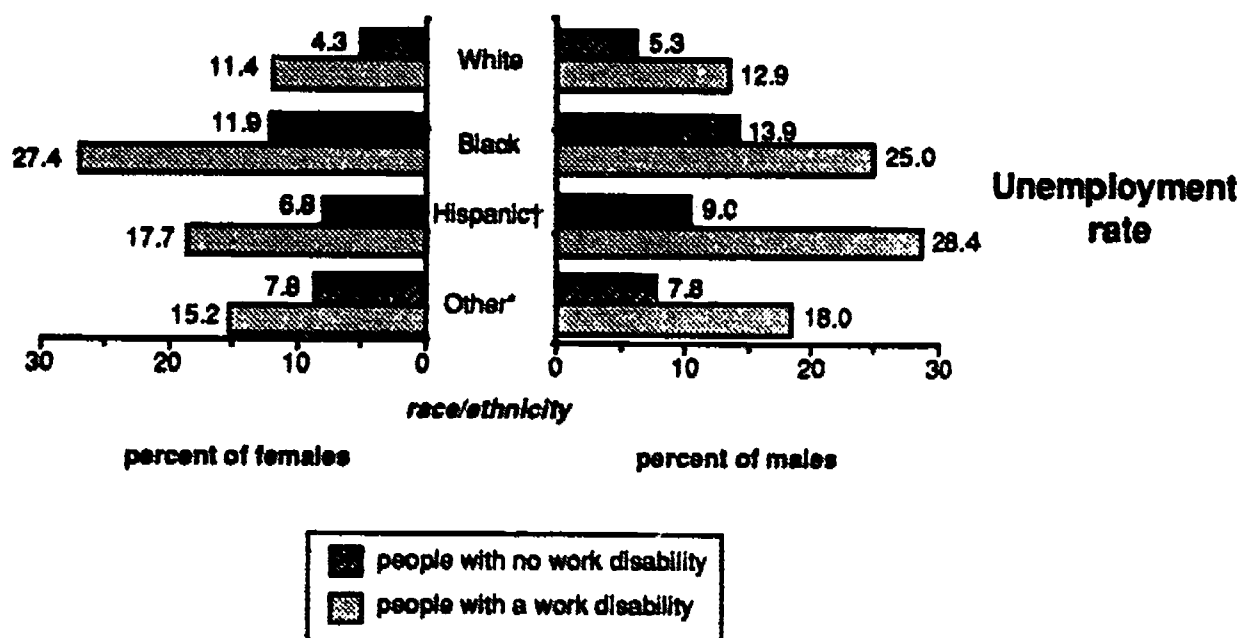


Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

How many people with a work disability are unemployed?

Of those people age 16 to 64 with a work disability in the labor force (4,239,000 people), one out of seven (14.2%) are unemployed (602,000). This rate is the same for men and women. In comparison, only one out sixteen men (6.2%) and one out of nineteen women (5.2%) with no work disability who are in the labor force are unemployed. The highest rates of unemployment occur for blacks and Hispanics: 25% of black men and 27.4% of black women who have a work disability are unemployed; 28.4% of Hispanic men and 17.7% of Hispanic women are unemployed. Only 12.9% of white males and 11.4% of white females with a work disability are unemployed. Only 12.9% of white males and 11.4% of white females with a work disability are unemployed. Only 12.9% of white males and 11.4% of white females with a work disability are unemployed.

Unemployment among people with a work disability is more than twice that of their nonwork-disabled counterparts for men and women and for each race/ethnic group.



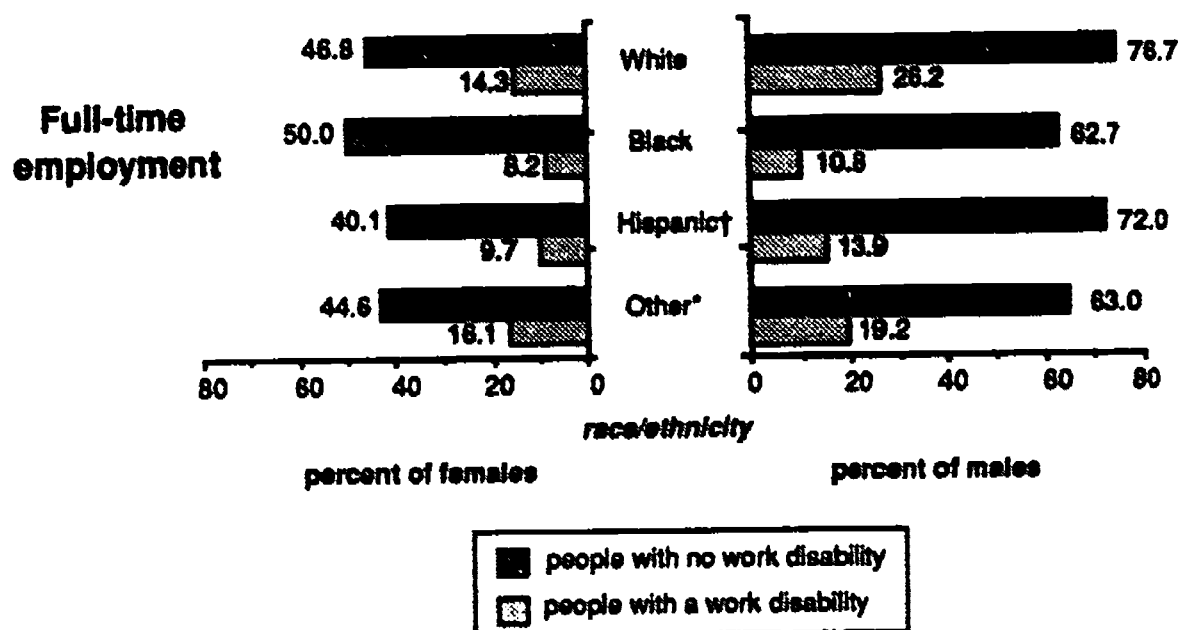
† Persons of Hispanic origin can be of any race
 * Other includes all races other than White or Black

Source: Bureau of the Census, Special Studies, Series P-23, # 160
 Survey: CPS, 1988

How many people with a work disability are working full-time?

Only 18.2% of the 13.4 million people with a work disability are employed full-time. In comparison, 60.6% of nonwork-disabled people are employed full-time. The difference is true regardless of sex, race, or ethnicity. Work disabled persons are employed full-time one-sixth to one-third as often as their nonwork-disabled counterparts of the same sex, race, and ethnicity.

People with a work disability are less likely to work full-time, year-round than those with no work disability for men and women and for each race/ethnic group.



† Persons of Hispanic origin can be of any race

* Other includes all races other than White or Black

Source: Bureau of the Census, Special Studies, Series P-23, #160
Survey: CPS, 1988

What types of occupations are held by people with a work disability who are employed?

The distribution of people with work disabilities in various occupations differs from that of people without work disabilities. The most frequent occupational group for men with a work disability is operators, fabricators, and laborers (27.4%). Most men without a work disability, 26.3%, are managers and professionals.

Women with a work disability are most frequently in technical, sales, and administrative support (39.5%) and service (27.3%) positions. Most women without a work disability are also working in technical, sales, and administrative support positions (45.3%), followed by 25.6% working as managers and professionals.

People with a work disability tend to have service and operators, fabricators and laborers occupations more than people with no work disability.

OCCUPATIONAL GROUP	with a work disability		without a work disability	
	males	females	males	females
Total employed population	100% 2,052,000	100% 1,582,000	100% 57,584,000	100% 48,141,000
Managerial and professional specialty	18.2 374,000	16.0 254,000	26.3 15,192,000	25.6 12,361,000
Technical, sales, and administrative support	17.5 361,000	39.5 626,000	19.9 11,468,000	45.3 21,850,000
Service	12.5 257,000	27.3 433,000	9.2 5,311,000	17.0 8,219,000
Farm, forestry, and fishing	4.6 95,000	1.4 22,000	3.7 2,144,000	0.8 424,000
Precision, production, craft, and repair	19.8 403,000	2.2 35,000	19.8 11,420,000	2.2 1,092,000
Operators, fabricators, and laborers	27.4 563,000	13.3 212,000	20.9 12,049,000	8.7 4,194,000

Source: Bureau of the Census, Special Studies, Series P-23, #160
Survey: CPS, 1988

What industries do people with a work disability work in the most?

Men with a work disability are employed mainly in the service (25.7%) and manufacturing sectors (21.0%). Their counterparts with no work disability are employed at a slightly higher rate in manufacturing (23.5%) than in service (22.4%).

Women with a work disability are concentrated in the service sector (47.3%), followed by retail trade (19.3%), as are their counterparts with no work disability (43.7% service, 18.9% retail trade).

People with a work disability are most often employed in the services, manufacturing, and retail trade industries.

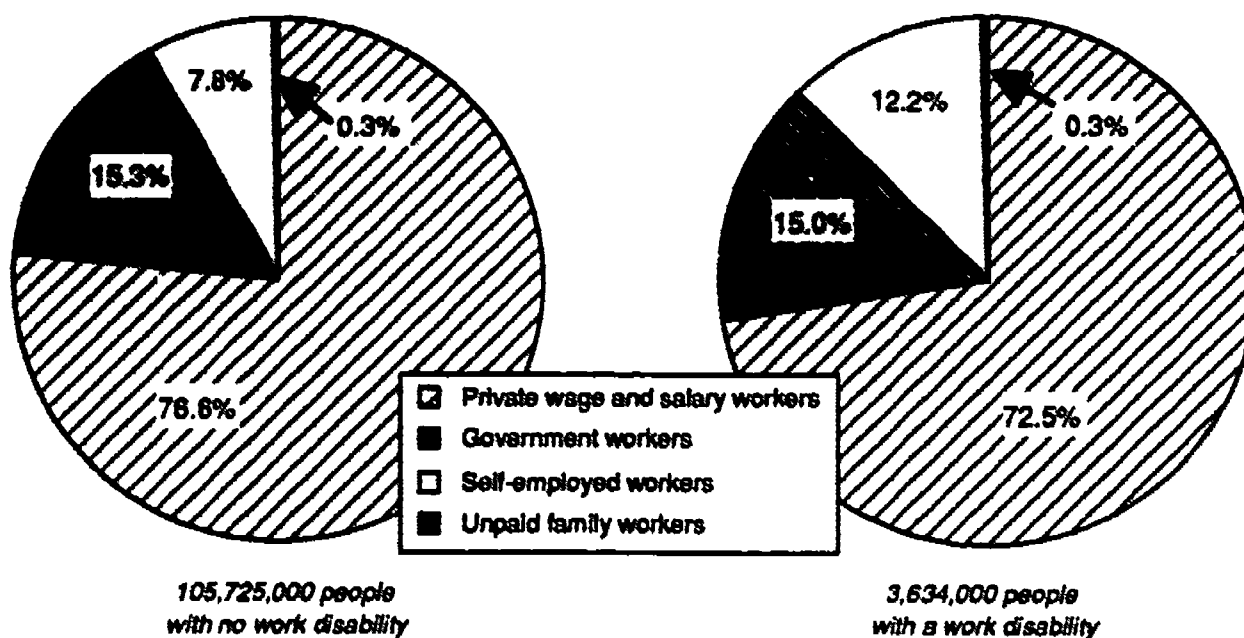
INDUSTRY GROUP	with a work disability		without a work disability	
	males	females	males	females
Total employed population	100% 2,052,000	100% 1,582,000	100% 57,584,000	100% 48,141,000
Agriculture	3.9 82,000	1.9 30,000	3.3 1,939,000	1.1 565,000
Forestry and fishing	0.2 4,000	0.1 3,000	0.1 89,000	- 32,000
Mining	1.1 24,000	- 1,000	0.9 563,000	0.3 145,000
Construction	12.6 259,000	1.1 17,000	10.2 5,915,000	1.1 567,000
Manufacturing	21.0 431,000	12.2 193,000	23.5 13,581,000	13.7 6,636,000
Transportation, communications, & other public utilities	9.2 190,000	3.8 60,000	9.3 5,412,000	4.2 2,070,000
Wholesale trade	5.2 108,000	1.8 29,000	5.3 3,056,000	2.4 1,195,000
Retail trade	11.4 235,000	19.3 307,000	14.7 8,482,000	18.9 9,106,000
Finance, insurance, and real estate	4.5 94,000	7.2 115,000	4.7 2,751,000	9.5 4,589,000
Services	25.7 528,000	47.3 750,000	22.4 12,911,000	43.7 21,043,000
Public administration	4.7 97,000	4.8 76,000	5.0 2,885,000	4.5 2,195,000

Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

Who employs people with a work disability?

Approximately three-fourths of all workers are private wage and salary workers regardless of work disability status. Percentages of those with a work disability who are private wage and salary workers, or government workers are slightly lower than for those without a work disability. On the other hand, higher rates of workers with a work disability are self-employed (14.6% of men with a work disability are self-employed compared to 9.6% of men with no work disability and 9.0% of women with a work disability are self-employed compared with 5.6% of women with no work disability).

People with a work disability have the same employers as those without a work disability.



SECTION 5

WORK DISABILITY, INCOME , AND EARNINGS

This section is devoted to the income and earnings of people with a work disability. Income is differentiated from earnings in that income includes all sources providing earnings and/or benefits to the person.

Answers to the questions of *Do work disability levels differ by income?*, *What are the average earnings of working people with a work disability?*, and *What is the poverty status of persons with a work disability?* are provided in the following pages.

Finally, the sources of income and benefits for people with a work disability are presented.

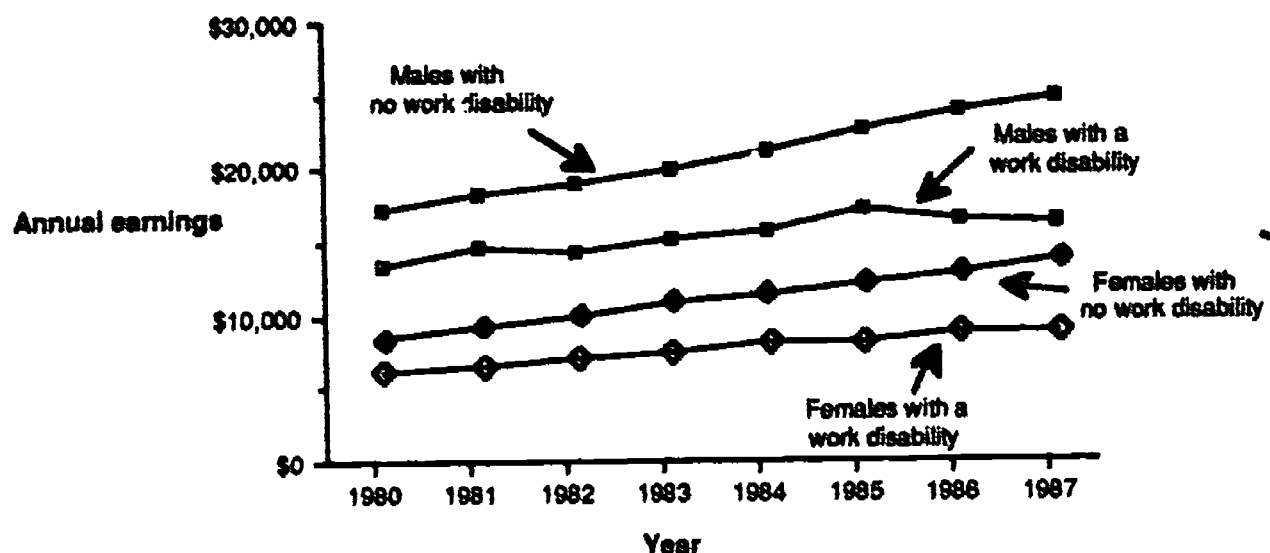
What are the average earnings of working people with a work disability?

Earnings of disabled workers in full-time employment are lower than for workers with no work disability. The mean earnings in 1987 of workers with a work disability are \$12,253 compared to \$18,951 for workers without a work disability.

The reduction in earnings among workers with a work disability is large for both men and women. Earnings for men with no work disability are approximately 55% higher than for those with a work disability. For women, the earnings are approximately 61% higher for those without a work disability. Whether or not they have a work disability, men on average, earn more than women.

While earnings for those with no work disability have consistently risen during the 1980s, for those with a work disability, earnings have dropped off in recent years, especially for men.

Earnings for people with a work disability continue to be lower than earnings for those with no work disability.

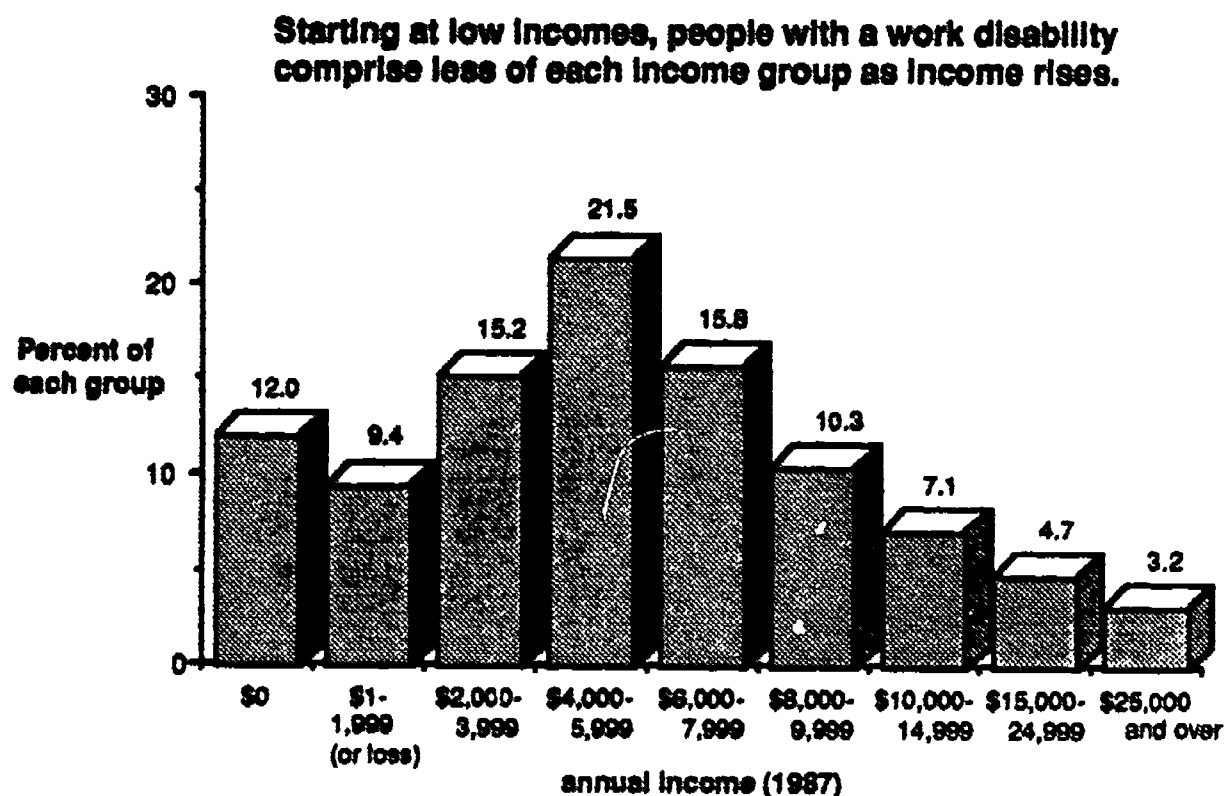


Source: Bureau of the Census, Special Studies, Series P-23, #160
Survey: CPS, 1988

What is the relationship between income and work disability?

The median annual income of persons with a work disability in 1987 was \$6,319, while for people with no work disability it was \$14,354 or more than twice as much. For females the median annual income was \$4,813 for those with a work disability, while it was \$9,722 for those without a work disability. For males, however, the difference is much greater. For males with a work disability the median annual income was \$8,616, but for those with no work disability it was \$20,792.

In addition, income groups differ with respect to the prevalence of work disability: 12.0% of persons with no income have a work disability, versus 8.3% of those with income. In 1987, the highest prevalence of work disability was in the \$4,000 - \$5,999 group (21.5%), decreasing as income rose or fell from this level.



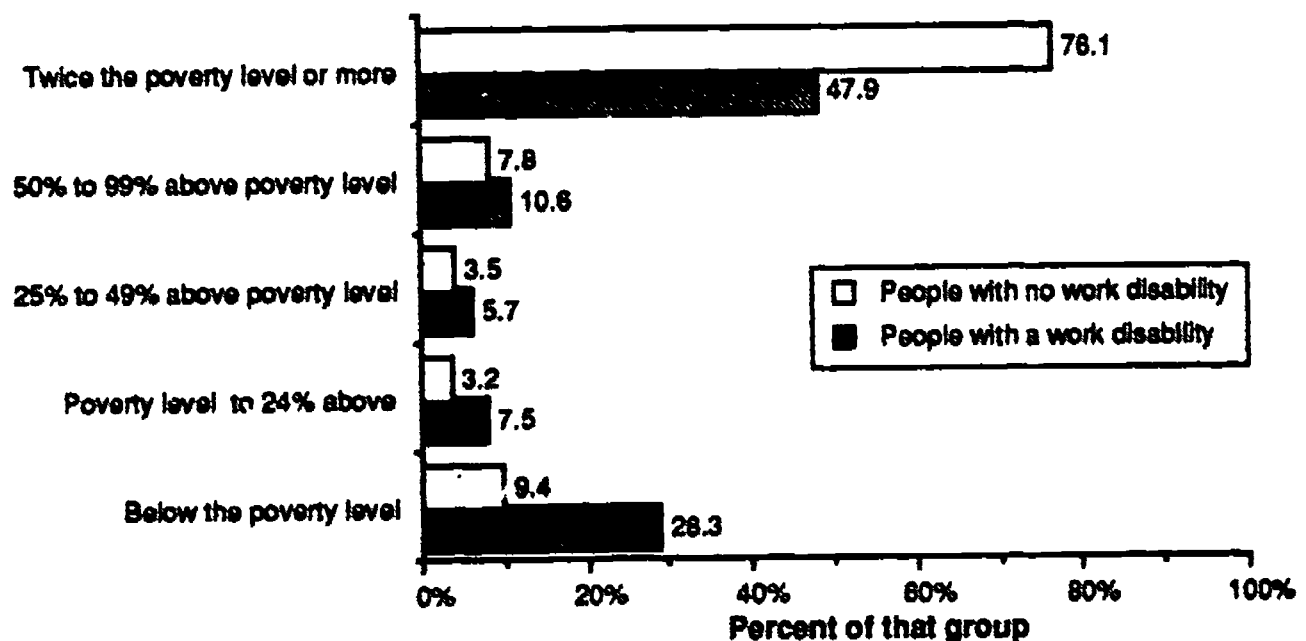
Source: Bureau of the Census, Special Studies, Series P-23, #160
Survey: CPS, 1988

What is the poverty status of persons with a work disability?

For people with a work disability, the income of families or unrelated individuals is often lower than the poverty level. Almost three out of ten persons with a work disability (28.3%) are below the poverty level. In comparison, only one out of ten (9.4%) of their counterparts with no work disability are in the same poverty situation. On the other end of the spectrum, over three-fourths (76.1%) of people with no work disability are at least twice the poverty level, compared to 47.9% of people with work disabilities (see graph below).

For people in the labor force, 17.3% of those with a work disability are in living situations that are below the poverty level. Of people with no work disability in the labor force, only 6.6% find themselves in the same situation. While 63.7% of people with a work disability who are in the labor force are at least twice the poverty level, this rate still falls well below the 79.8% of their counterparts with no work disability.

People with a work disability are much more likely to be below the poverty level than people with no work disability.



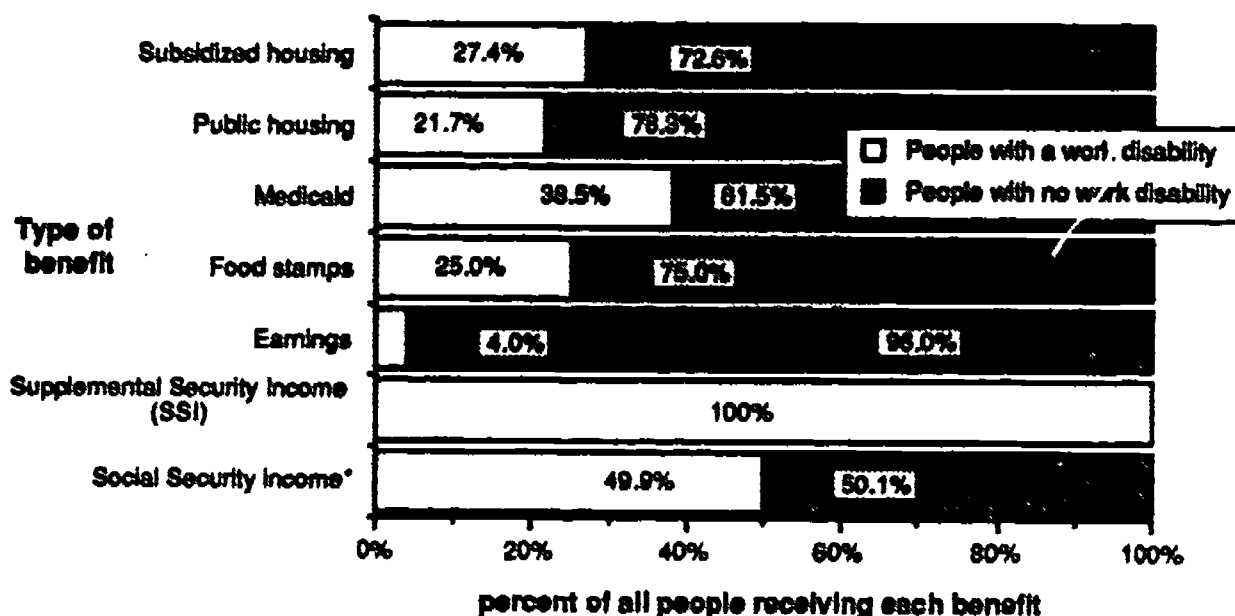
Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

What are the sources of income and benefits for persons with a work disability?

Almost eight million people between the ages of 16 and 64 receive income from Social Security, half of whom have a work disability. All of those age 16-64 receiving Supplemental Security Income (SSI) have a work disability (over two million people). Two and one-half million people with a work disability receive food stamps, comprising 25% of the recipients age 16 to 64. Close to three million people with a work disability receive Medicaid making up just over one-third of all recipients age 16 to 64. About one million people with a work disability are in public or subsidized housing as compared to three times that number of those with no work disability. However, barely 5 million people with a work disability receive earnings, compared to over 119 million people with no work disability of working age (16 to 64 years old).

Between 80% and 90% of those people who have a work disability and are receiving any of the benefits described above are not in the labor force. In comparison, between 42% (for the public and subsidized housing beneficiaries) and 65% (for the Social Security and food stamp recipients) of those with no work disability and receiving those benefits are not in the labor force.

The proportion of people with a work disability receiving benefits varies by type of benefit.



* Social Security income refers to all sources of benefit from the Social Security Administration including retirement, disability insurance, and railroad retirement.

Source: Bureau of the Census, Special Studies, Series P-23, # 160
Survey: CPS, 1988

SECTION 6

SUPPORT FOR PEOPLE WITH A WORK DISABILITY

There are federal, state and local agencies which provide various types of assistance for people with work disabilities. In this section, data from three federal programs are presented.

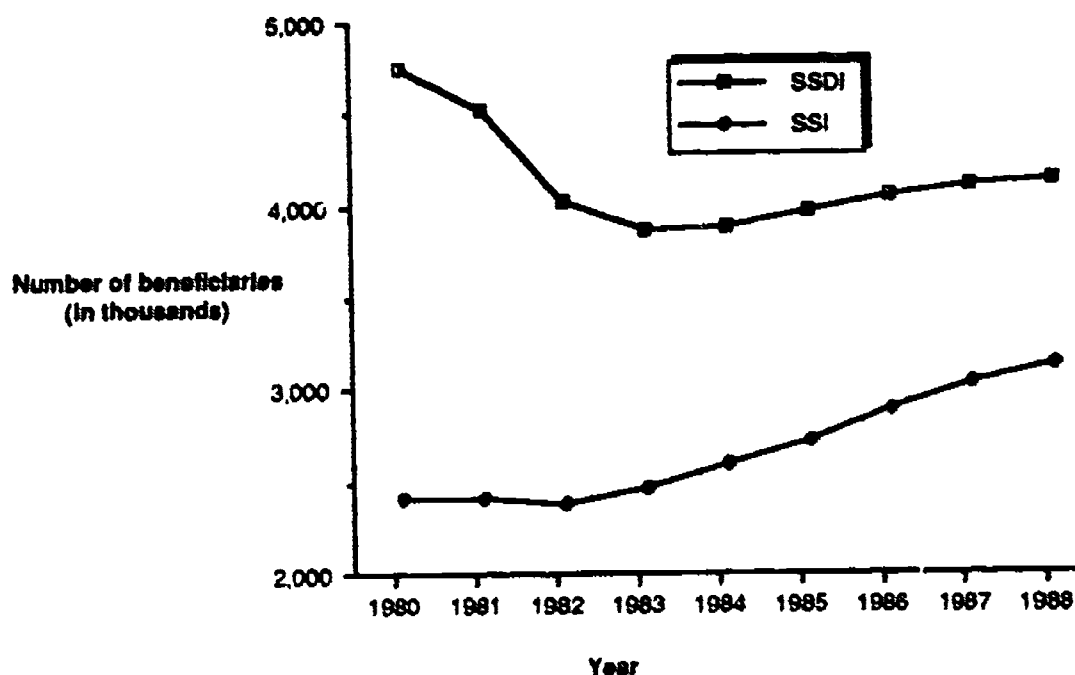
Questions about benefits from federal programs assisting people with a work disability are answered: *How many people with a work disability receive benefits from the Social Security Administration?*, *How many people with mental disorders receive benefit payments from the Social Security Administration through SSDI or SSI?*, and *How many people receive Worker's Compensation?* Questions about the state-federal Vocational Rehabilitation system are also answered: *How many people with disabilities does Vocational Rehabilitation help?*, *What kinds of conditions do people have who are helped by Vocational Rehabilitation?*, *Where in the labor market does the Vocational Rehabilitation system place successful clients?*, and *Do people who are successfully rehabilitated by the Vocational Rehabilitation system work full-time?*

How many people with a work disability receive benefits from the Social Security Administration?

The Social Security Administration has two insurance programs which provide benefits to working age individuals with disabilities: **Social Security Disability Insurance (SSDI)** and **Supplemental Security Income (SSI)**. During the 1980s, SSDI had a drop in beneficiaries, especially through 1983. SSI has had a steady increase in beneficiaries since about 1983. There were 4.2 million beneficiaries of all ages in current payment status for SSDI through mid-1990. An additional 3 million people of all ages received SSI benefits.

While the two programs cover people in several different areas (survivors, children, etc.), they share the same disability definition: the inability to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or that has lasted or can be expected to last for a continuous period of at least 12 months.

Working-age Social Security beneficiaries with a disability dropped in the mid-1980's but have increased recently.



Source: Social Security Bulletin Annual Statistical Supplement, 1989
Social Security Administration Program data, 1990

How many people with mental disorders receive benefit payments from the Social Security Administration through SSDI and SSI?

As of 1988, 395,134 persons age 18 to 64 with mental disorders receive federally administered SSI payments. This represents 27.7% of all people of that age group with a diagnosis who are receiving SSI benefits. At the same time, 578,708 workers disabled because of mental disorders receive SSDI benefits - 21.9% of all SSDI beneficiaries with a diagnosis. In both programs, people with mental disorders are the largest diagnostic group receiving benefits for the working age population.

People with mental disorders comprise large portions of SSI and SSDI beneficiaries at the younger working ages.

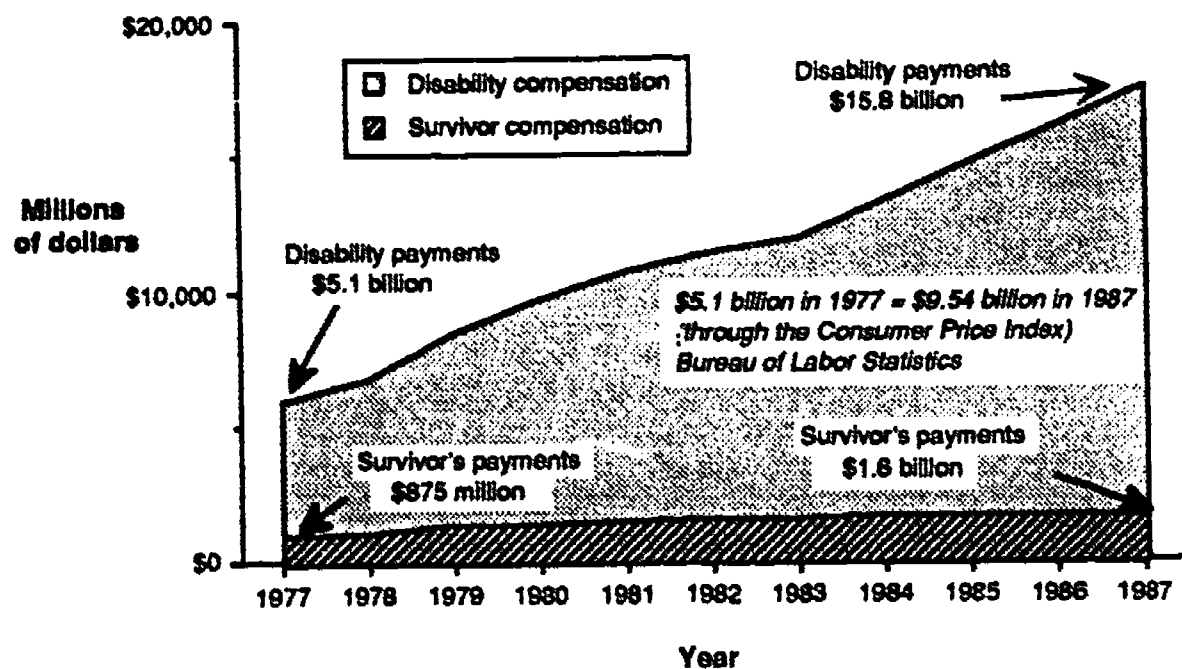
Source: Social Security Bulletin, Annual Statistical Supplement, 1989
(1% sample of Social Security Administration program data)

How many people receive Workers' Compensation?

There were an estimated 88.4 million workers covered per month in 1987 by **Workers' Compensation**. Disability compensation payments were \$15.8 billion in 1987. Just ten years earlier, in 1977, the payments totaled just over \$5 billion. This 210% rise was greater than that of the Consumer Price Index (which rose 87% over the ten year period) and of the Workers' Compensation payments to survivors (which rose 83%).

Employers' self-insurance payments in 1987 reached \$5.2 billion. Ten years earlier, these payments were \$1.3 billion.

Worker's Compensation disability payments have more than tripled in the past decade.



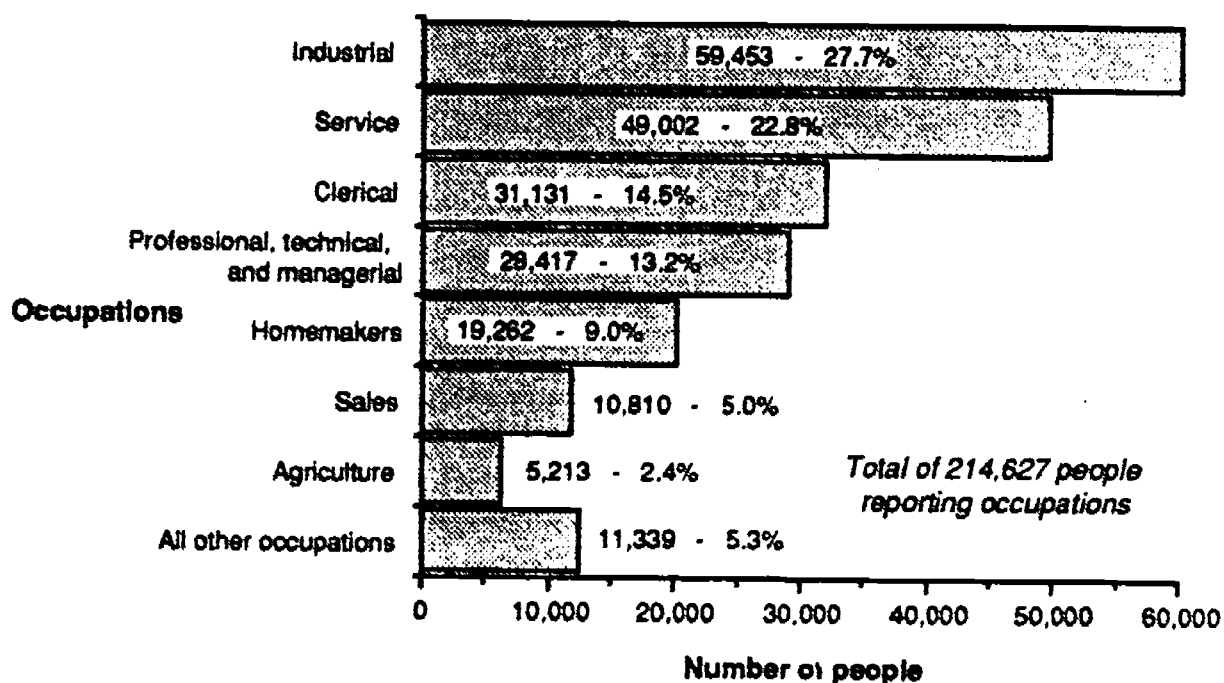
Source: **Social Security Bulletin** Annual Statistical Supplement, 1989
Social Security Administration Program data, 1987

How many people with disabilities does Vocational Rehabilitation help?

In fiscal year 1989, **Vocational Rehabilitation (VR)** rehabilitated 220,408 people, 146,487 of whom were classified as severely disabled. The program served 928,998 persons in that year, 624,552 of whom were severely disabled.

Of those rehabilitated in 1988, the most common occupations at closure were industrial (27.7%), service (22.8%), clerical (14.5%), and professional, technical, and managerial (13.2%).

The Vocational Rehabilitation system places people into a wide range of occupations.

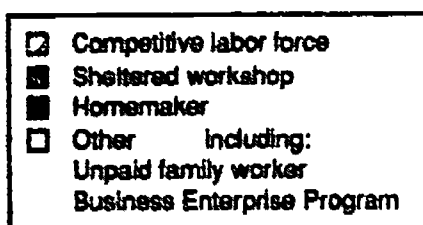
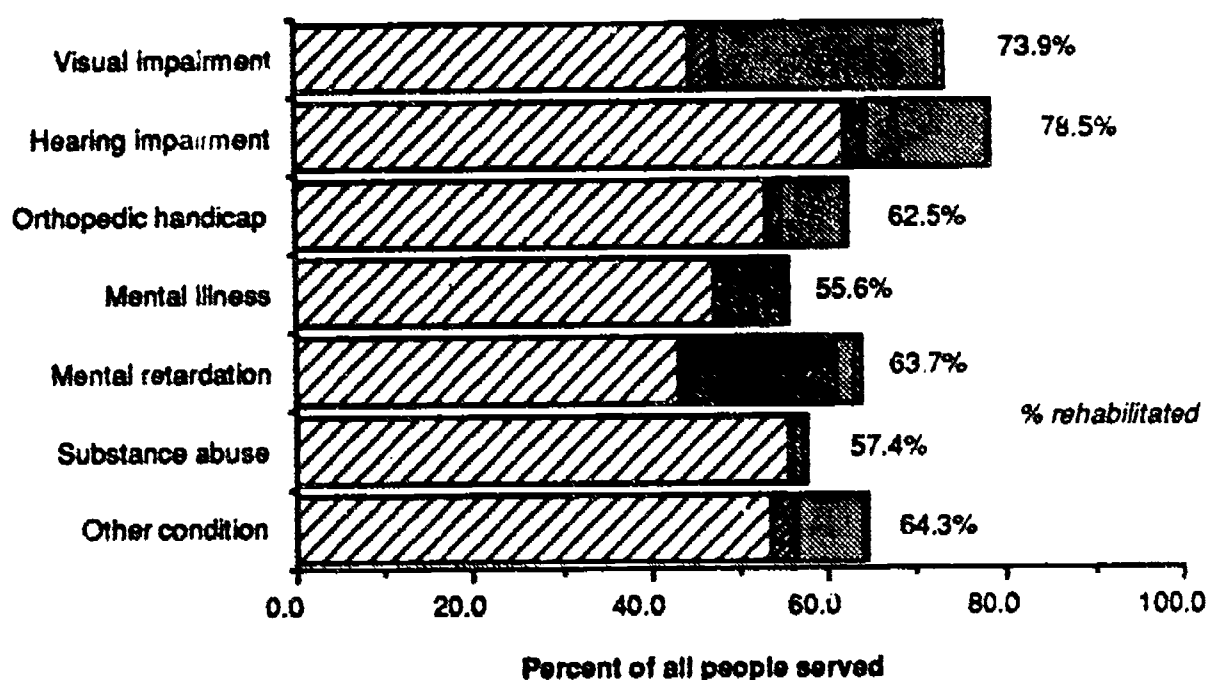


Source: U.S. Department of Education Information Memoranda RSA-IM-88-23 and RSA-IM-88-24
Rehabilitation Services Administration program statistics, 1988, 1989

What kinds of conditions do people have who are helped by Vocational Rehabilitation?

Most of the clients accepted by VR for service end up "rehabilitated" - in a vocational placement consistent with their abilities (64.2% in 1985). This success rate varies for people with different conditions. Higher rates are found for those with an hearing impairment (78.5%) and a visual impairment (73.9%). Clients with mental retardation (63.7%), orthopedic handicaps (62.5%), substance abuse (57.4%), and mental illness (55.6%), however, had rates falling below the overall average. The majority of people in any disability category are placed in competitive employment.

Many people who use VR services have a job when they are finished.



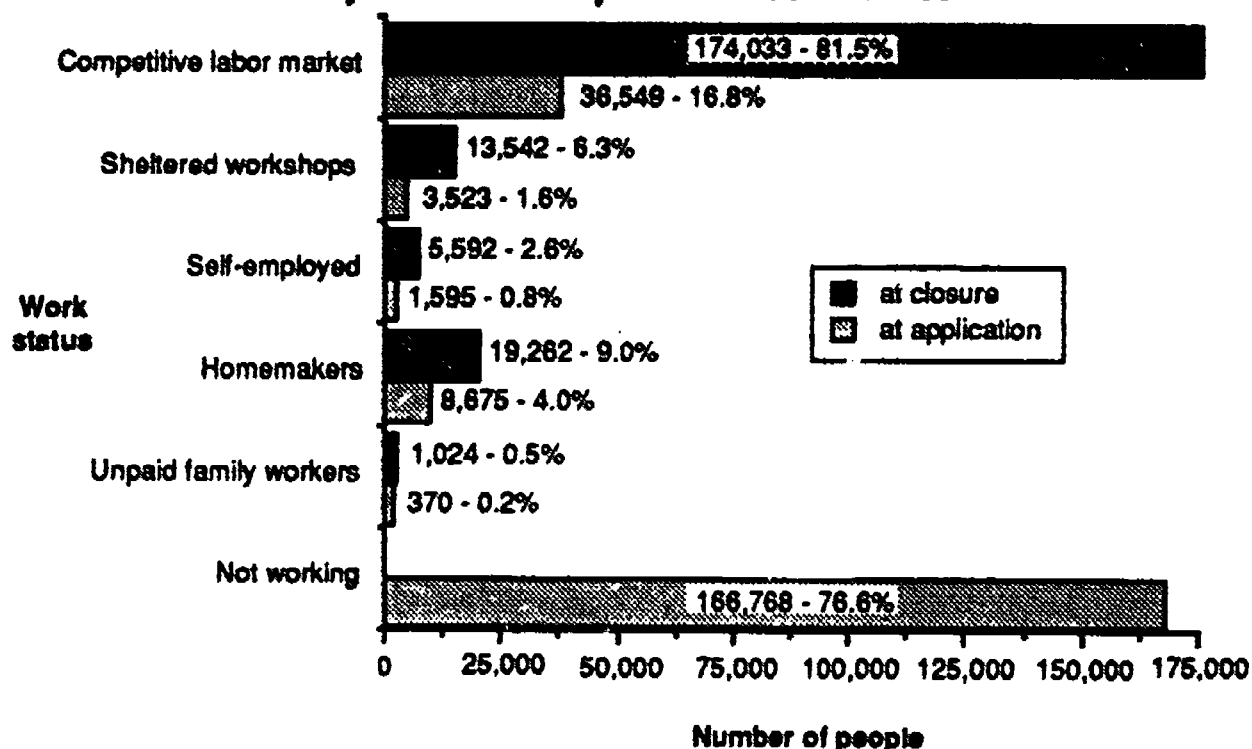
Source: Rogers, 1989
RSA program data from FY1985 R-300 Data Tape

Where in the labor market does the Vocational Rehabilitation system place successful clients?

The vast majority of clients who are successfully rehabilitated through the **Vocational Rehabilitation (VR)** system are placed in competitive employment (81.5% of the 218,241 people rehabilitated). The remainder were placed as homemakers (9.0%), in sheltered workshops (6.3%), self-employed (2.6%), and unpaid family workers (0.5%).

Applicants in 1988 who were accepted for service (which can last from less than 4 months to more than 3 years) were most often not working (76.7%) or in competitive employment (16.8%). Small levels of homemakers (4.0%), those in sheltered workshops (1.6%), self-employed people (0.8%), and unpaid family workers (0.2%) also were accepted.

More than 8 of every 10 successful vocational rehabilitation clients has a job in the competitive labor market.



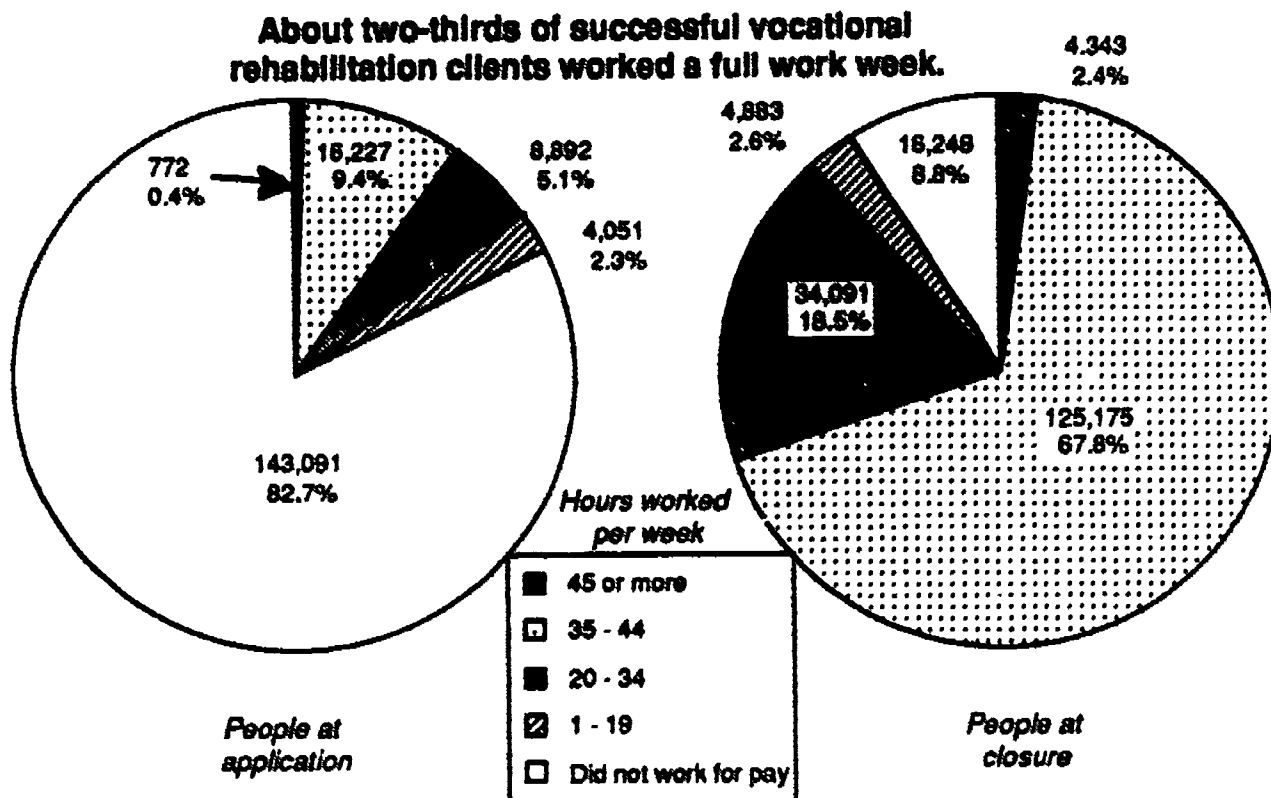
Source: Rehabilitation Services Administration program statistics, 1989

Do people who are successfully rehabilitated by the Vocational Rehabilitation system work full-time?

The average hours worked by those clients who were successfully rehabilitated by the VR system is 33.4 per week. This includes a portion of people who did not work for pay, however. When looking at those clients who did any kind of work, the average hours per week was 36.4. In fact, 67.8% of all successful clients worked between 35 and 44 hours per week. Another 18.5% worked from 20 to 34 hours.

For those who applied and were accepted for services in 1988, 82.7% were not working for pay at the time of their application. The average hours worked for these people was 5.5 hours. For those who were working for pay at the time, the average was 31.8 hours per week.

Technical Note: Average as calculated by a mean



Source: Rehabilitation Services Administration program statistics, 1989

Glossary

This list provides explanation of terms used in the book that may require clarification. Each of these terms is referenced on the page(s) upon which it is used. The definitions are taken from the survey or footnoted publication as closely as possible in order to convey the original authors' perspectives.

Chronic health condition: A condition that a respondent described as having persisted for three or more months is considered to be chronic, as is any condition that is on a list of conditions always classified as chronic no matter how long the person has had the condition (NHIS).

Earnings: The sum of wages and/or salary and net income from farm and nonfarm self-employment.

Full-time employment: A full-time employed worker, according to the CPS, is one who worked primarily at full-time civilian jobs 50 weeks or more during the preceding calendar year.

Functional limitation: The SIPP asked respondents about their ability to perform the following specific sensory and physical activities: (1) seeing ordinary newspaper print (with glasses or contacts if normally used); (2) hearing normal conversation (using aid if normally used); (3) having speech understood; (4) lifting or carrying 10 lbs.; (5) walking a quarter of a mile without resting; (6) climbing a flight of stairs without resting; (7) getting around outside; (8) getting around inside; or (9) getting into and out of bed. Difficulty in performing any of these activities is classified as a functional limitation in the SIPP.

Institutions: The Census counts anyone in an institution on the day of the census as institutionalized. Institutions include correctional institutions, mental (psychiatric) hospitals, residential treatment centers, tuberculosis hospitals, chronic disease hospitals, homes for the aged, homes and schools for the mentally handicapped, homes and schools for the physically handicapped, homes for unwed mothers, homes for dependent and neglected children, training schools for juvenile delinquents, and detention homes for juveniles.

Labor force: As used by the Bureau of the Census in the March Supplement of the Current Population Survey (CPS), the labor force includes people employed as civilians, unemployed, or in the Armed Forces during the survey week (see also Unemployment rate). People who are neither employed nor seeking employment are not included in the labor force (people engaged in housework, attending school, unable to work because of long-term physical or mental illness, persons who are retired or too old to work, seasonal workers in an off season, and voluntarily idle people).

Mean annual income: The CPS measures the mean annual income by dividing the total income of individuals by the total number of individuals. Income includes wages or salary, interest, dividends, Social Security retirement, Supplemental

Security Income, public assistance or welfare, veterans payments, unemployment, worker's compensation, private or public pensions, alimony, child support, regular contributions from persons not living in the household, and other periodic income.

Occupational illnesses and injuries: From the *Recordkeeping Guidelines for Occupational Injuries and Illnesses*, the definition used by the Annual Survey of Occupational Illnesses and Injuries (ASOII) for occupational injury is any injury such as a cut, fracture, sprain, etc., which results from a work accident or from exposure involving a single incident in the work environment. Occupational illness is any abnormal condition, acute or chronic illness, disease, or disorder (other than occupational injury) caused by exposure to environmental factors (inhalation, absorption, ingestion, or direct contact).

Poverty level: Poverty statistics presented in this report are based on a definition developed by the Social Security Administration in 1964 and revised by Federal Interagency Committees in 1969 and 1980. The poverty index provides a range of income cutoffs adjusted by such factors as family size and number of children under 18 years old.

Rehabilitated: The successful placement of a client of a state Vocational Rehabilitation (VR) agency into competitive, sheltered, or self-employment, or homemaking and unpaid family work for a minimum of 60 days after the completion of all necessary rehabilitation services (see Vocational Rehabilitation).

Severe functional limitation: The Survey of Income and Program Participation (SIPP) regards a person who is unable to perform or needs the help of another person to perform one or more of a list of physical functional activities as having a severe functional limitation (see Functional limitation for list of activities).

Severe work disability: The Current Population Survey (CPS) classifies persons as having a severe work disability if (1) they did not work in the survey week because of a long-term physical or mental illness that prevents the performance of any kind of work, (2) they did not work at all in the previous year because of illness or disability, (3) they are under 65 years of age and covered by Medicare, and (4) they are under 65 years of age and a recipient of Supplemental Security Income (SSI) (see also Work disability).

Social Security Disability Insurance (SSDI): A federal program in the Social Security Administration providing monthly benefits to disabled workers and their dependents. A person builds protection through employment covered under Social Security (compulsory tax on earnings). The disability definition is an inability to engage in substantial gainful activity because of any medically determinable permanent physical or mental impairment. Later amendments made the disability length of time necessary for eligibility to be at least five months.

Supplemental Security Income (SSI): This federally administered program provides the ability for an individual to qualify for payments based on age, blindness, or disability. The disability definition is any person unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or that has lasted or

can be expected to last for a continuous period of at least 12 months. Blindness refers to any person with 20/200 or less vision in the better eye with the use of correcting lenses, or with tunnel vision of 20 degrees or less.

Unemployed: Unemployed people include those who, during the CPS week, had no employment but were available for work and (1) had engaged in a specific job seeking activity within the past 4 weeks, (2) were waiting to be called back to a job from which they had been laid off, or (3) were waiting to report to a new wage or salary job within 30 days (see Labor force participation rate). The number of unemployed persons divided by the number of people in the labor force. The number of unemployed persons divided by the number of people in the labor force is the unemployment rate.

Vocational Rehabilitation: This refers to programs conducted by state Vocational Rehabilitation agencies operating under the Rehabilitation Act of 1973 to provide or arrange for a wide array of training, educational, medical, and other services individualized to the needs of persons with disabilities. The services are intended to help these persons acquire, reacquire, or maintain gainful employment. Most of the funding is provided by the federal government.

Work disability: Persons were classified as having a work disability by the Current Population Survey (CPS) if they met any of the following criteria: (1) had a health problem or disability which prevents them from working or which limits the kind or amount of work they can do, (2) had a service connected disability or ever retired or left a job for health reasons, (3) did not work in survey week because of a long-term physical or mental illness or disability which prevents the performance of any kind of work, (4) did not work at all in 1986 because of illness or disability, (5) under 65 years of age and covered by Medicare, or (6) under 65 years of age and a recipient of SSI (Supplemental Security Income) (see also Severe work disability).

Work limitation: In the NHIS, a person can be described as having a work limitation if he or she describes a chronic health condition that prevents performance of work at all, allows only certain types of work to be performed, or prevents him or her from working regularly.

Workers' compensation: A program providing benefits to persons injured or disabled while working.

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Appendix

In this appendix, information on the sources and limitations of the data is presented. The major surveys covered in this publication are the Current Population Survey (CPS), the National Health Interview Survey (NHIS), the Survey of Income and Program Participation (SIPP), the Annual Survey of Occupational Injuries and Illnesses (ASOII), and the Census. These surveys provide the most current national numbers and estimates from respondent-based information. Estimates from surveys are within the past 10 years.

The following summaries will cover the surveys, their sampling formats, the respondent size, and definitions of terms used in the surveys concerning work disability and how it is measured. More details can be found in the original publications.

CPS - The Current Population Survey is a monthly survey done by the Bureau of the Census which deals mainly with labor force data for the civilian noninstitutional population. The part of the survey with which we are concerned for this publication is the March Income Supplement. Questions relating to labor force participation are asked of all members who are 14 or older in a household. In March, supplementary questions are asked about income thereby supplying the data for characteristics of noninstitutionalized persons with a work disability.

Sampling - The CPS sample was selected from the 1970 Census files covering all 50 states and the District of Columbia. The sample is continuously updated to reflect new construction.

Respondents - 60,500 households were eligible, but 2,500 were nonresponses (95.8% response rate). This translates into approximately 120,000 persons (assuming 2.5 people per household and lowering the estimate because the sample only includes ages 14 and above).

Definitions - Work disability is the only disability measured by the CPS. People are classified as having a work disability if they

(1) have a health problem or disability which prevents them from working or limits the kind or amount of work they can do; or

(2) have a service connected disability or ever retired or left a job for health reasons; or

(3) did not work in the survey week because of long-term physical or mental illness or disability that prevents the performance of any kind of work; or

(4) did not work at all in previous year because of illness or disability; or

(5) are between 16 and 65 years of age and are covered by Medicare; or

(6) are between 16 and 65 years of age and a recipient of SSI (Supplemental Security Income).

NHIS - The National Health Interview Survey is a nationwide sample of households done by the National Center for Health Statistics (NCHS). It queries the civilian, noninstitutionalized population of the United States on its health. For disability purposes, it is concerned with activity limitations and chronic conditions.

Sampling - A multistage probability design permitting a continuous sampling of the population. Each weekly sample is representative of the target population and is additive with other weekly samples. Sampling is done throughout the year thus preventing seasonal bias. The samples are grouped in four major geographic regions: Northeast, Midwest, South, and West. Surveys after 1985 use a redesign of the sampling which reduces sampling units by half and oversamples the black population.

Respondents - The following samples were reached: 1983- 105,620; 1984- 105,290; 1985- 91,531, 1986- 62,052 and 1988 - 127,000. Budgetary considerations affected the sample size in the final part of 1985 and 1986. Response rate averaged 96% for 1983-1985, and was approximately 96.5% in 1986. It was expected to be similar for 1988.

Definitions - **Chronic condition** is one noticed for three months or more, or being on the NCHS list of chronic conditions. **Impairment** is defined as a chronic or permanent defect that results from disease, injury, or congenital malformation. **Disability** refers to any long or short-term reduction of a person's activity as a result of an acute or chronic condition. **Limitation of activity** is a long-term reduction in a person's capacity to perform the average kind or amount of activities associated with his or her age group. For the purposes of this publication, the age group of interest is the working age group 18 to 69 year olds and the major activity associated with that age group is work.

SIPP - The Survey of Income and Program Participation is a longitudinal survey conducted by the Bureau of the Census. It is actually the third wave to the 1984 and 1986 panels of the SIPP. Core areas are covered at every survey period, while specific areas of interest are done during one runthrough. This wave is concerned with health and disability. As with the NHIS, the SIPP covers the noninstitutionalized population of residents living in the U.S.

Sampling - The same households are interviewed every four months for 2-1/2 years. A cycle of four interviews covering the entire sample, using the same questionnaire, is called a wave.

Respondents - The May/August third wave sample size was 19,100 households. While no numbers are given on number of individuals interviewed (because it is a household survey), a rough estimate would be 49,000 (using an estimated 2.5 persons per household). The response rate ranged from 90% in May to 86% in August.

Definitions - **Functional limitations** are defined from the questions asked about the difficulty in performing basic functions (seeing, hearing, speech, walking, carrying or lifting 10 lbs., getting around in or out of the house, and getting into or out of bed). **Disability** for adults is referred to only in terms of limitation or the inability to perform work.

ASOII - The Annual Survey of Occupational Injuries and Illnesses collects data on work-related injuries, illnesses, and fatalities for the Bureau of Labor Statistics from a random sample of private establishments.

Sampling - An independent sample is selected for each state. The sample design is based on the total recorded case incidence rate. The sample is stratified on the Standard Industrial Classification (SIC) code and employment.

Respondents - The survey covered 280,000 private establishments and represents about 83 million workers in the private sector.

Census of Persons in Institutions and Group Quarters - This part of the Census enumerated the number of people with work disabilities in institutions. The Census covers the different types of institutions and asks several demographic questions including age, sex, race/ethnicity, education level, income, occupation, and, most important for this publication, work disability.

Sampling - The basic sampling unit is the person living in a group quarter. Two sampling rates were used: (1) in counties, incorporated places, and minor civil divisions estimated at less than 2,500 people, one-half of all persons in group quarters were included; (2) in all other areas, one-sixth of the units were

sampled. The lists of sites were created from commercial mailing lists or canvassing neighborhoods prior to interview.

Respondents - Together these rates accounted for 19% of the nation's units.

Definitions - **Work disability** is defined here as involving a condition (physical or mental) lasting 6 or more months which limited the amount of work a person could do at a job.